

US Model Canadian Model E Model **UK Model**

This complete service manual contains TC-880-2 PART 1, therefore discard your TC-880-2 PART 1.

STEREO TAPECORDER

SPECIFICATIONS

Power Requirements:

Model	Voltage	Frequency
USA	120 V ac	50/60 Hz
Canada	120 V ac	50/60 Hz
E	100, 110, 120, 127, 220, 240 V ac	50/60 Hz
UK	110, 127, 220, 240 V ac	50/60 Hz

Power Consumption:

1	Model	Watt
	USA	135
	Canada	135
	E	120
	UK	120

Track System:

record	2-track 2-channel stereo/monaural
playback	2-track 2-channel stereo/monaural 4-track 2-channel stereo

Tape Speed:

38 cm/sec (15 ips) 19 cm/sec (7½ ips)

Recording Time:

With 1,100 m (3,600 ft) tape, 26.7 cm $(10\frac{1}{2})$ inch) reel

Stereo recording

approx. 45 min. at 38 cm/sec (15 ips) approx. 90 min. at 19 cm/sec $(7\frac{1}{2} \text{ ips})$

Mono recording

approx. 180 min. at 19 cm/sec (7½ ips)

Fast Winding Time:

With 740 m (2,400 ft) tape, 26.7 cm ($10\frac{1}{2}$ inch) reel approx. 2 min. 30 sec.

26.7 cm ($10^{1}/_{2}$ inch) or smaller Reels:

Drive System: Direct drive Bias Frequency: 160 kHz Equalization: NAB standard S/N Ratio:

65 dB with SONY ferri-chrome tape 62 dB with SONY SLH-180 tape

59 dB with standard tape

Harmonic Distortion:

0.5 %

Crosstalk at 1 kHz: 55 dB

Frequency Response: According to NAB standard

Таре	Tape	Speed
Tape	19 cm/sec (7 ½ ips)	38 cm/sec (15 ips)
SONY standard	25~20,000 Hz ± 2dB	25~30,000Hz ± 2dB
SONY SLH	25~25,000 Hz ± 2dB	25~35,000 Hz ± 2dB
SONY ferri-chrome	30~30,000 Hz ± 2dB	20~40,000 Hz ± 2dB

Wow and Flutter:

According to NAB standard 0.02 % at 38 cm/sec (15 ips), WRMS 0.03 % at 19 cm/sec ($7\frac{1}{2}$ ips), WRMS

According to DIN standard

± 0.03 % at 38 cm/sec (15 ips) ± 0.04 % at 19 cm/sec (7½ ips)

Inputs: MIC IN

> (phone jack) . (connector, XLR-3-13) ... 2 (E, UK Model)

(connector, XLR-3-14)

.. 2 (USA, Canada Model)

Sensitivity 0.2 mV (-72 dB) Accept low impedance mics.

LINE IN (phono jack) 2 Sensitivity 0.06 V (-22 dB)

Impedance 100 k Ω



Outputs:

> Output level 0.435 V (-5 dB) at load impedance of 100 k Ω with the PB ATT and FINE controls set to the reference

level position.

Suitable load impedance . . .

higher than 10 $k\Omega$

HEADPHONE (phone jack).....1

Accept 8 Ω stereo headphones. Furnished with a level control.

Accessory AC Outlet: Unswitched 1 (300 W maximum)

(Except for UK Model)

Dimensions:

Response Range:

 $465 \text{ (w)} \times 515 \text{ (h)} \times 265 \text{ (d)} \text{ mm} \\ 13\frac{3}{8} \text{ (w)} \times 20\frac{3}{8} \text{ (h)} \times 10^{1}\!/_{2} \text{ (d)} \text{ inches}$

Including projecting parts and controls.

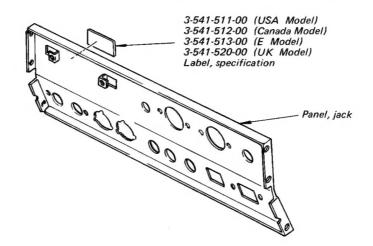
Approx. 36.5 kg (80 lb 6 oz) Weight: Optical Peak Program Meter (at peak mode)

Frequency Response: $30 \sim 30,000 \text{ Hz} \stackrel{+}{-} \stackrel{0}{3} \text{ dB}$ $-40 \text{ dB} \sim +15 \text{ dB} (0 \text{ dB} = 0.435 \text{ V})$

Response Time: 1 millisecond at PEAK mode

IDENTIFICATION OF SET

Identify TC-880-2 model by checking the specification label shown below.



(USA Model)

TAPECORDER TC-880-2 AC 120 V 60 Hz 135 W

NO.

MADE IN JAPAN

0000000000 0000000 00000000000

(Canada Model)

TAPECORDER TC-880-2 AC120 V 60 Hz 135 W NO MADE IN JAPAN

> 00000000 0000000000000

(E Model)

SONY

TAPECORDER TC-880-2 AC 100.110.120.127.220.240V 50/60Hz 120W

NO.

MADE IN JAPAN

(UK Model)

SONY

TAPECORDER TC-880-2 $110.127.220.240 \,\mathrm{V} \sim 50/60 \,\mathrm{Hz} \, 120 \,\mathrm{W}$

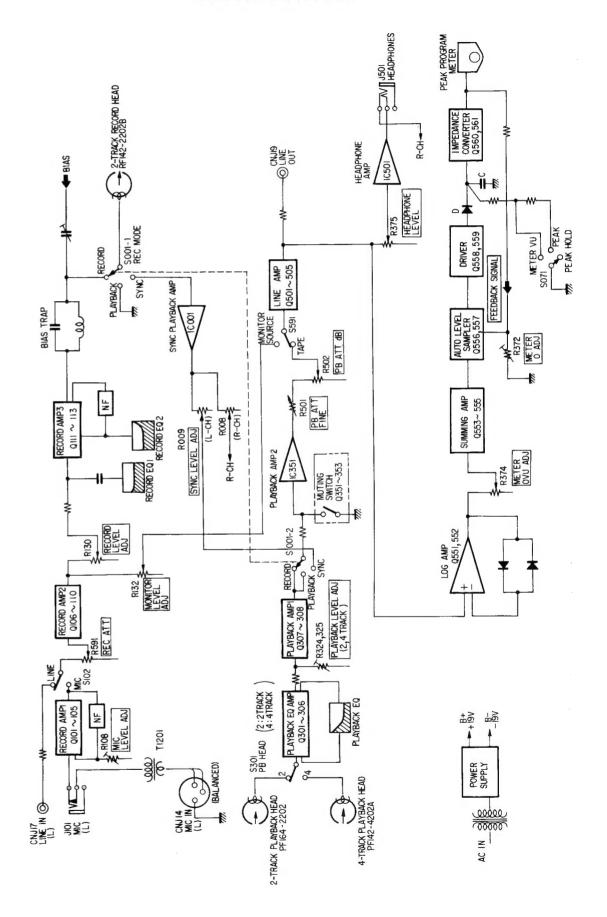
NO.

MADE IN JAPAN

SERVICING NOTE

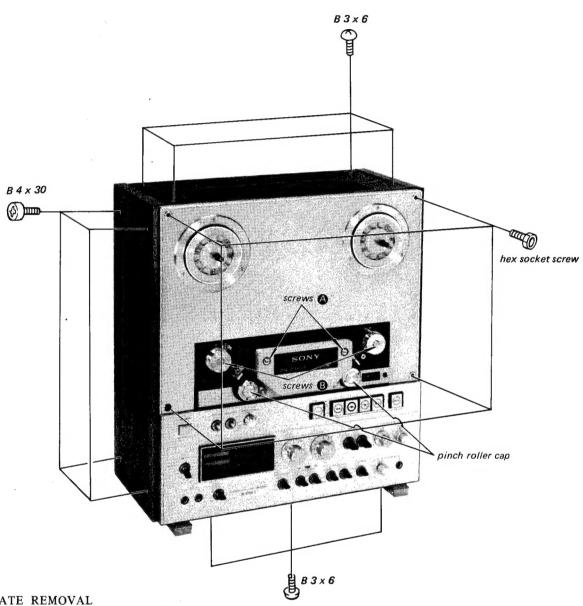
SERVICING NOTE When taking the capstan-motor-support bracket off, hold the shafts of the capstan motor and the flywheel. These shafts are supported by this bracket. capstan-motor-support bracket When the power transistors Q1201 \sim Q1208 in the rear are exposed, please take precaution that the lugs attached to the collectors do not bend and touch the heat sink especially while serving with the set lying horizontally.

SECTION 1 BLOCK DIAGRAM



SECTION 2 REMOVAL AND CHASSIS LAYOUT

2-1. REMOVAL



• REAR PLATE REMOVAL

----- Refer to the exploded view (1). Remove four screws (PS 4 x 8) fixing two feet on the lower case, and remove five screws (B 4 x 8) and five washers from the rear plate.

Note: Do not remove four screws (B 3 x 6) fixing the ventilation plate on the rear plate.

- HEAD COVER REMOVAL Remove two screws (A) shown above.
- GUIDE ROLLER REMOVAL Remove two screws **B** shown above.
- PINCH ROLLER CAP REMOVAL Turn the pinch roller caps shown above fully clock wise.

Fig. 2-1.

2-2. CHASSIS LAYOUT

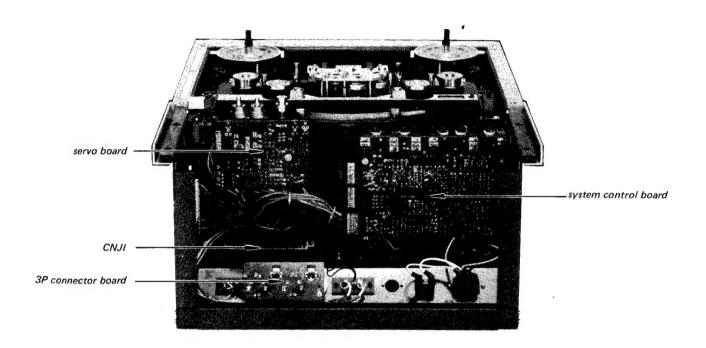


Fig. 2-2.

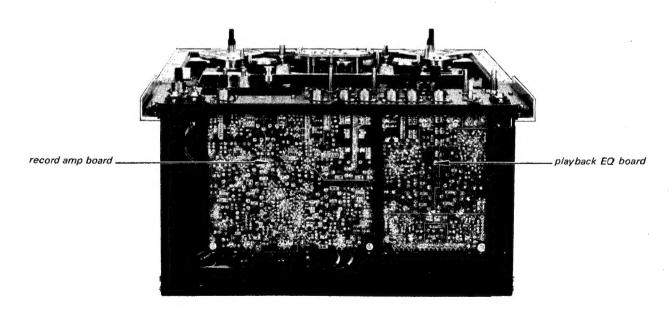


Fig. 2-3.

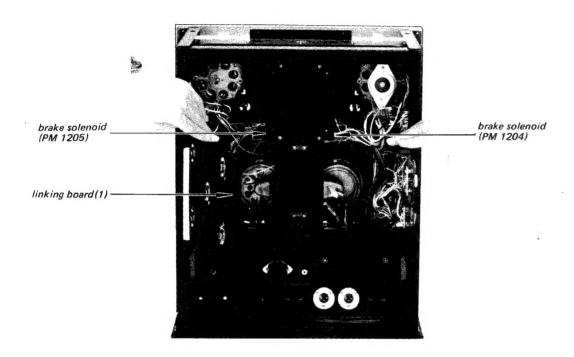


Fig. 2-4.

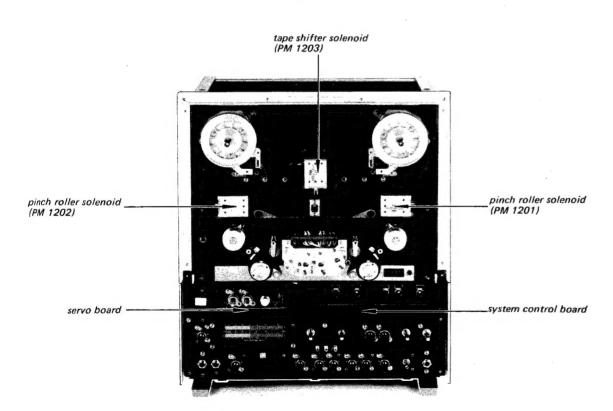


Fig. 2-5.

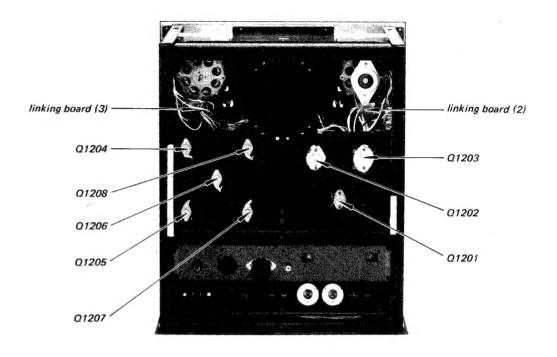


Fig. 2-6.

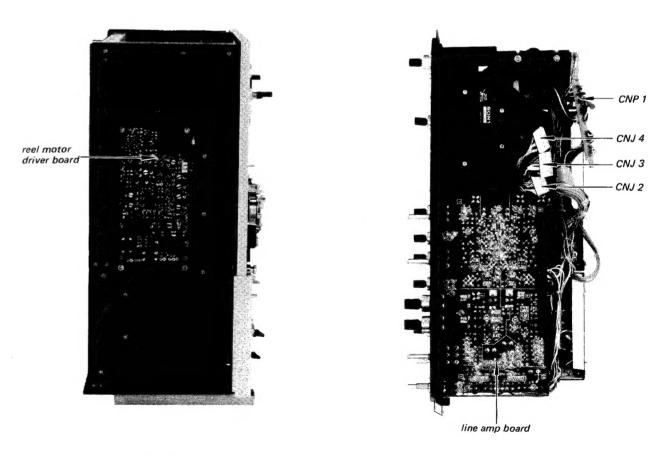
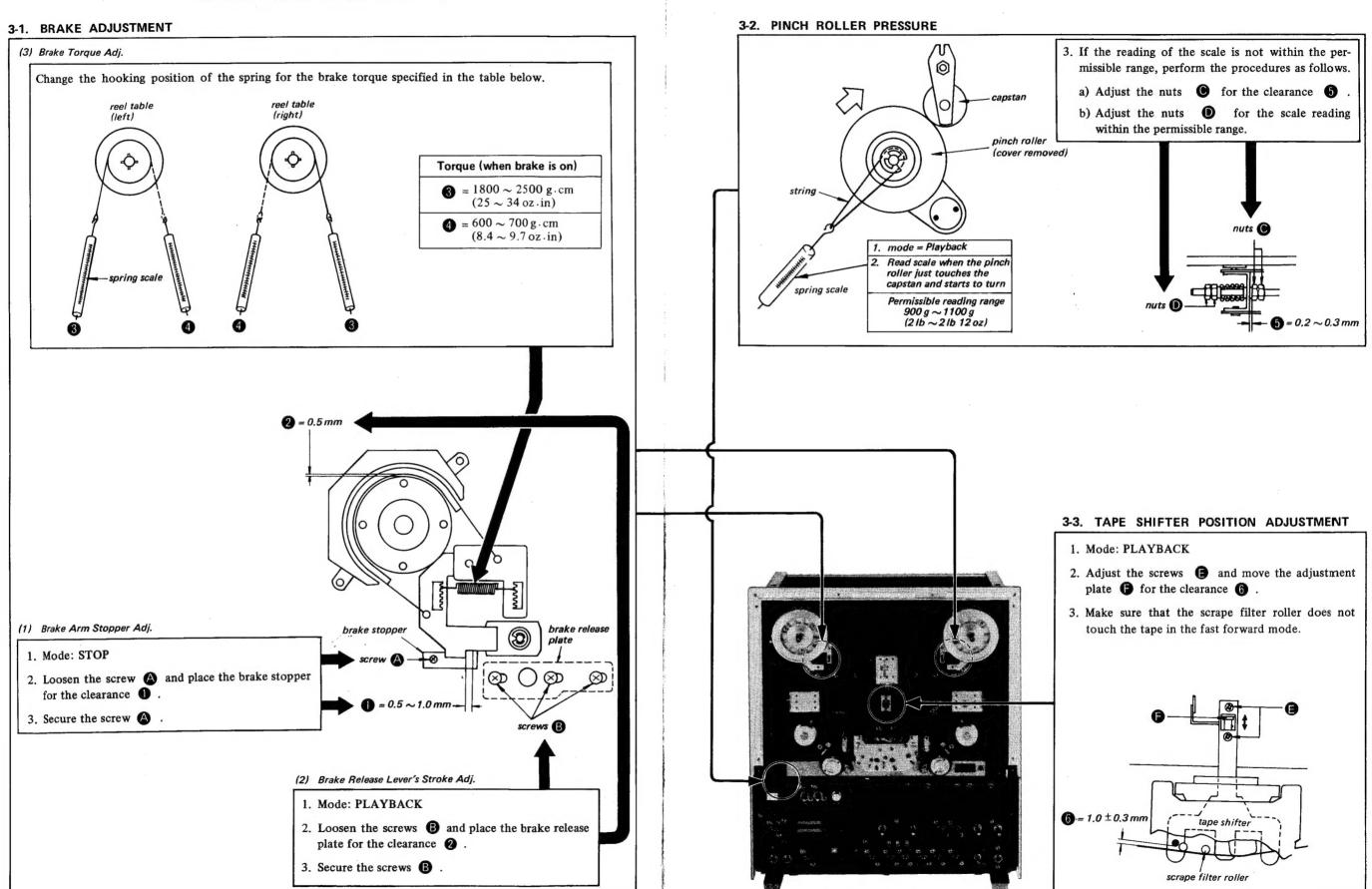


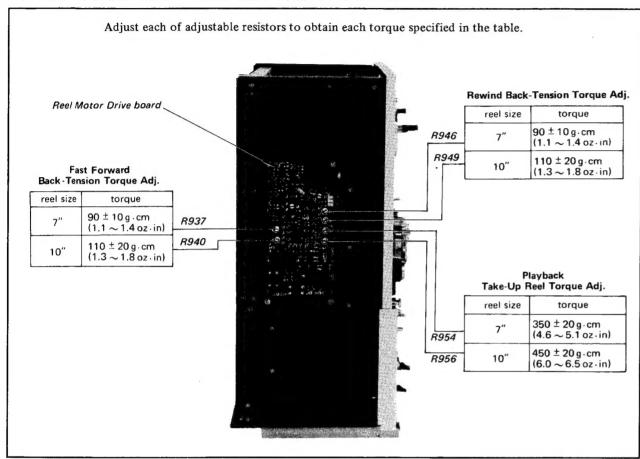
Fig. 2-8.

Fig. 2-7.

SECTION 3 MECHANICAL ADJUSTMENTS

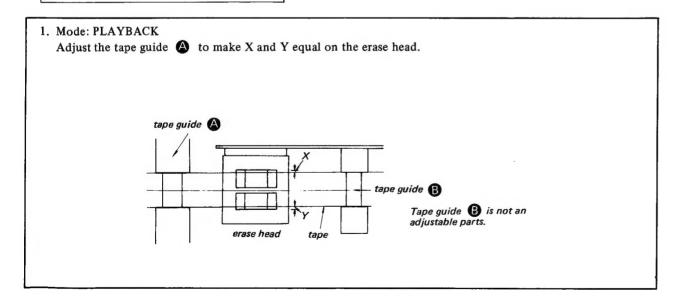


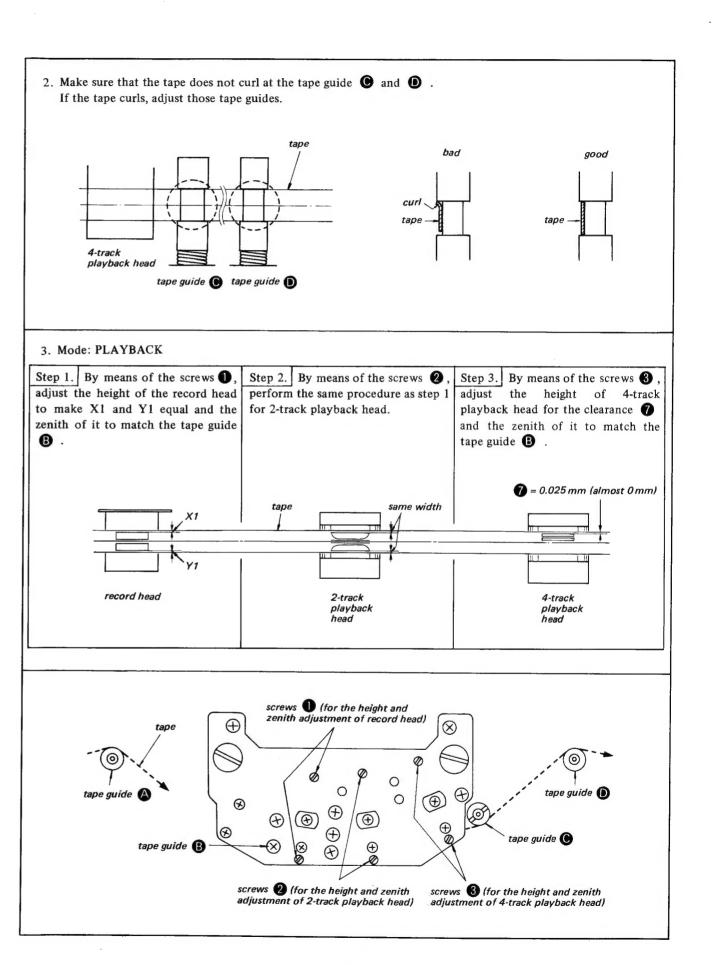
3-4. BACK TENSION AND TAKE-UP REEL TORQUE ADJUSTMENTS



3-5. TAPE GUIDE ADJUSTMENTS

Switch Control	Position
TAPE SPEED	38
This adjustment is perform	ned with a normal tape.





SECTION 4

ELECTRICAL ADJUSTMENTS

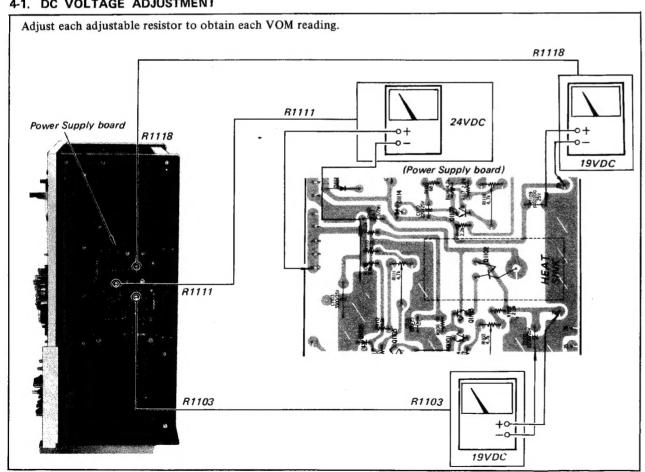
Required Sony Test Tapes are as follows.

_	TAPE SELECT switch		Barrarda.	
Test Tape	BIAS	EQ	Remarks	
J-19-F2	NORMAL	NORMAL	400 Hz - 0 dB , 400 Hz/10 kHz/ 12.5 kHz/7 kHz/80 Hz/40 Hz10 dB	
J-19-A2	NORMAL	NORMAL	12.5 kHz · -10 dB	
SPC-47	NORMAL	NORMAL	4 kHz · 0 dB	
NPS-1	NORMAL	NORMAL	blank (Sony normal tape)	
SLH-S1	NORMAL	SPECIAL	blank (Sony SLH tape)	
Fe-Cr-S1	NORMAL	Fe-Cr	blank (Sony Ferri-Chrome tape)	
		1	1	

Switch and Control Positions are as follows unless otherwise noted.

Switch Control	Position	Switch Control	Position
METER	VU	TAPE SPEED	19 cm/sec (7½ ips)
MIC ATT	30	CDEED TINING	•
INPUT SELECT	LINE	SPEED TUNING	off
REC MODE (L and R)	REC	REC ATT	"16"
PB HEAD		PB ATT (dB)	▲ ("10")
(playback head selector)	2	PB ATT (FINE)	CAL.
MONITOR	TAPE	TAPE SELECT (EQ)	NORMAL
REEL SIZE	7	TAPE SELECT (BIAS)	NORMAL

4-1. DC VOLTAGE ADJUSTMENT



4-2. PLAYBACK AND RECORD HEADS LATERAL ALIGNMENT

screws A

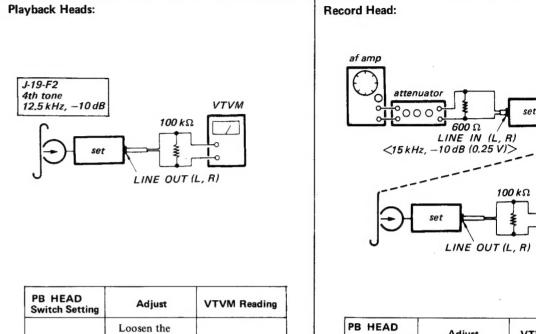
Loosen the screws B

and adjust the head position.

and adjust the head position.

"2"

"4"



maximum

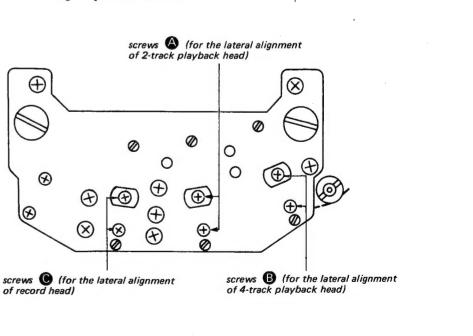
maximum

PB HEAD Switch Setting	Adjust	VTVM Reading
"2"	Loosen the screws (C) and adjust the head position.	maximum

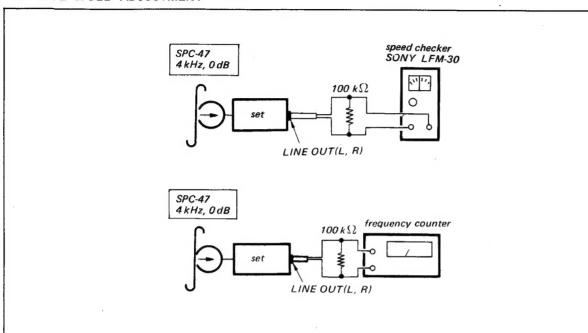
blank tape (normal tape)

VTVM

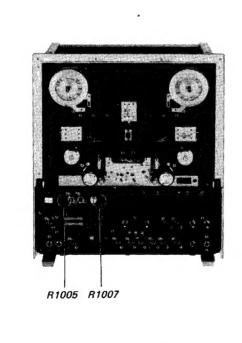
After the alignments, secure the screws and apply locking compound to the screws.



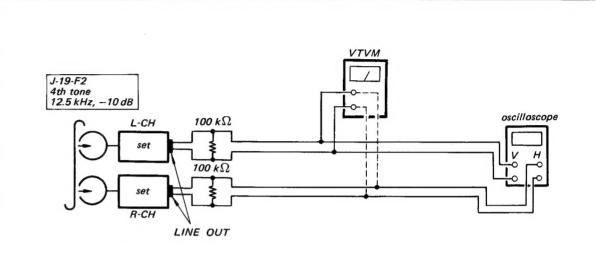
4-3. TAPE SPEED ADJUSTMENT



TAPE SPEED Switch Setting	Adjust	Speed Checker Reading	Frequency Counter Reading
19 cm/sec (7½ ips)	R1005	-0.1~+0.1%	3,996 ∼4,004 Hz
38 cm/sec (15 ips)	R1007	-0.1 ~+ 0.1 %	7,992~8,008 Hz

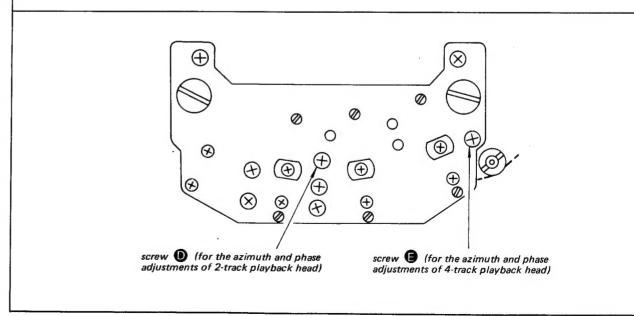


4-4. PLAYBACK HEAD AZIMUTH AND PHASE ADJUSTMENT

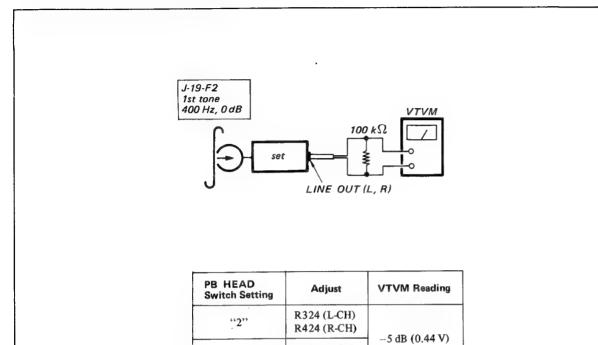


PB HEAD Switch Setting	Adjust	VTVM Reading	On the Oscilloscope		e	
"2"	screw D	maximum		0		0
"4"	screw (B	maximum	in-phase	30°	90°	more than 90°

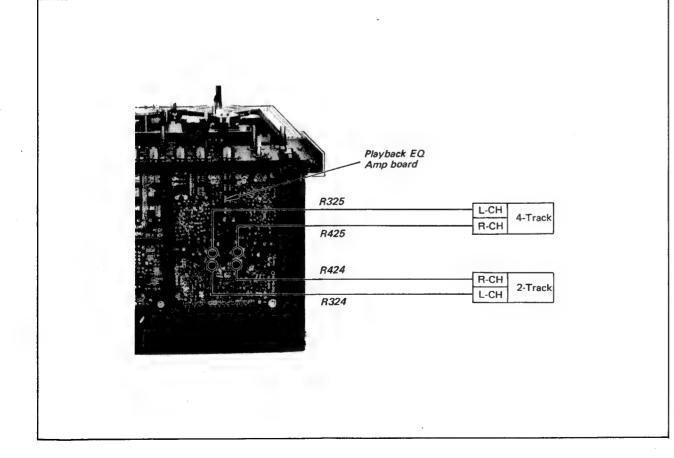
Note: If the maximum peaks for L-ch and R-ch do not coincide, set the screw **O** or **E** to the mechanical mid of the two positions for the peaks. At this time, the level should change no more than 1 dB from the maximum peaks.



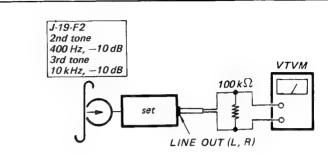
4-5. PLAYBACK LEVEL ADJUSTMENT



R325 (L-CH) R425 (R-CH)

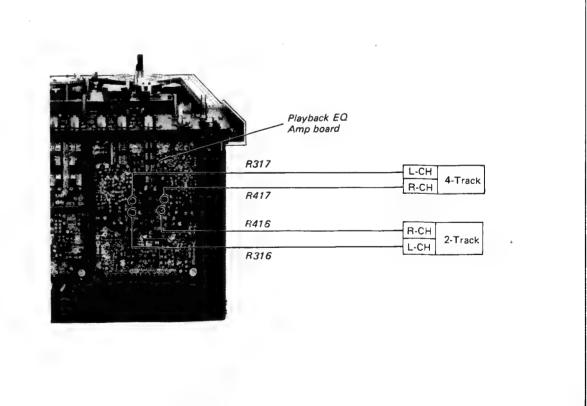


4-6. PLAYBACK EQUALIZER ADJUSTMENT

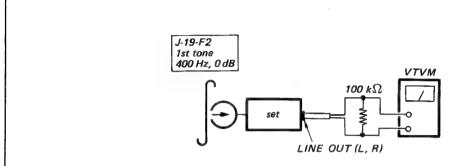


Step	PB HEAD Switch Setting	Test Tape J-19-F2	Adjust	VTVM Reading
1	"?"	2nd tone 400 Hz, -10 dB		Memorize the reading
2	2	3rd tone 10 kHz, -10 dB	R316 (L-CH) R416 (R-CH)	Same reading as Step 1
3	٠٠4٢٠	2nd tone 400 Hz, -10 dB		Memorize the reading
4	4	3rd tone 10 kHz, -10 dB	R317 (L-CH) R417 (R-CH)	Same reading as Step 3

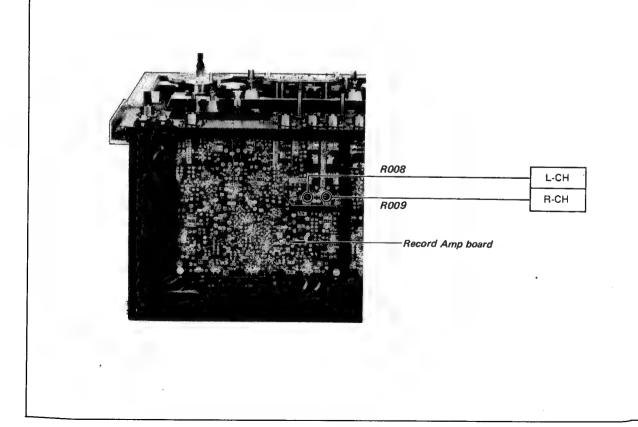
Note: After this adjustment, perform the playback level adjustment again.



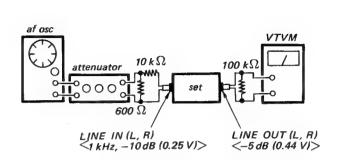
4-7. SYNC MODE (REC MODE SWITCH) PLAYBACK LEVEL ADJUSTMENT



REC MODE Switch	Adjust	VTVM Reading
SYNC (L only)	R008 (L-CH)	- 15 /0 // T
SYNC (R only)	R009 (R-CH)	-5 dB (0.44 V)

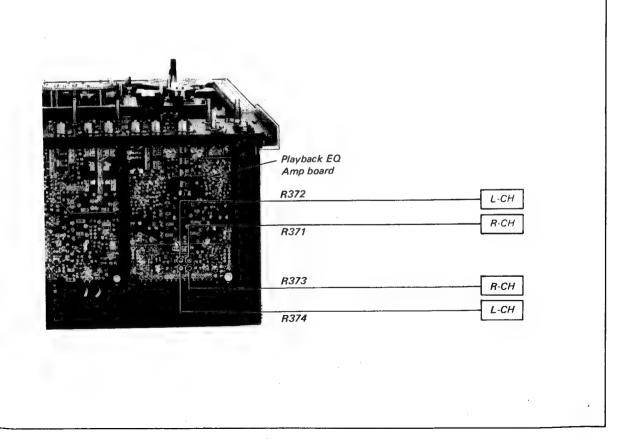


4-8. PEAK PROGRAM METER CALIBRATION

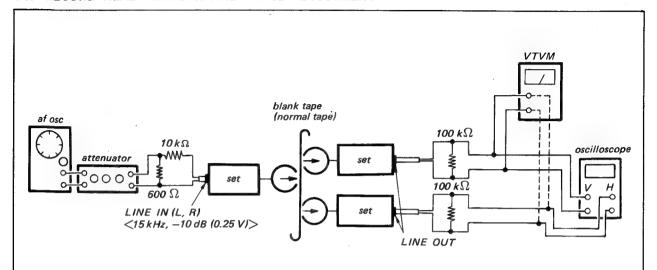


MONITOR Switch: SOURCE

Step	Mode	Adjust	Meter Reading	
1	playback	R371 (R-CH)	0% on peak	
	(with no input signal)	R372 (L-CH)	program meter	
2	with REC		-5 dB (0.44 V) on VTVM	
3	button only	R373 (R-CH)	0 dB on peak	
	pressed	R374 (L-CH)	program meter	

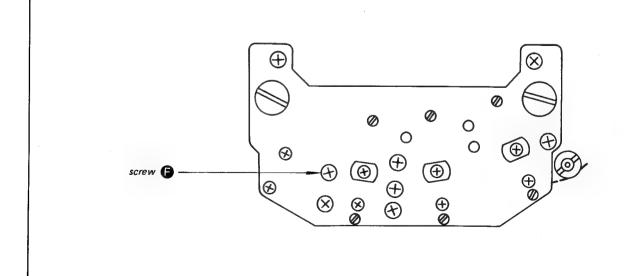


4-9. RECORD HEAD AZIMUTH AND PHASE ADJUSTMENT

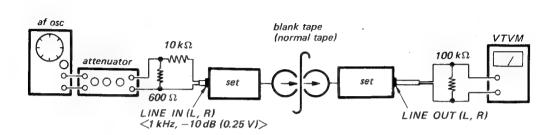


Adjust	VTVM Reading	On the Oscilloscope				
screw (5	maximum	\bigcirc	0		0	
		in-phase	30°	90°	more than 90°	
			good		wrong	

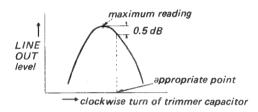
Note: If the maximum peaks for L-CH and R-CH do not coincide, set the screw **(F)** to the mechanical mid of the two positions for the peaks. At this time, the level should change no more than 1 dB from the maximum peaks.

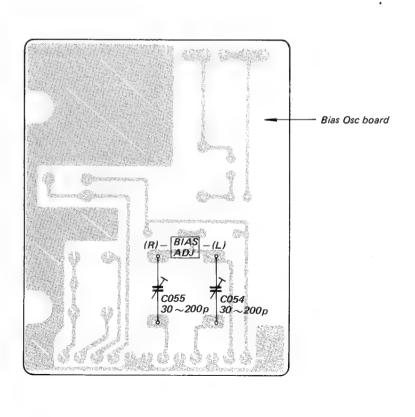


4-10. RECORD BIAS ADJUSTMENT

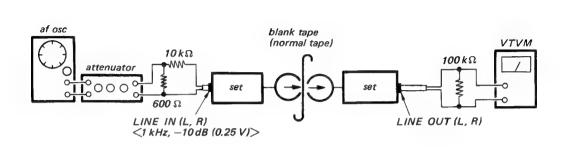


As trimmer capacitor C054 (L-CH) or C055 (R-CH) is slowly turned clockwise, VTVM reading will go up to a maximum and then start falling down. Adjust the capacitor until VTVM reads 0.5 dB below and beyond the maximum reading.

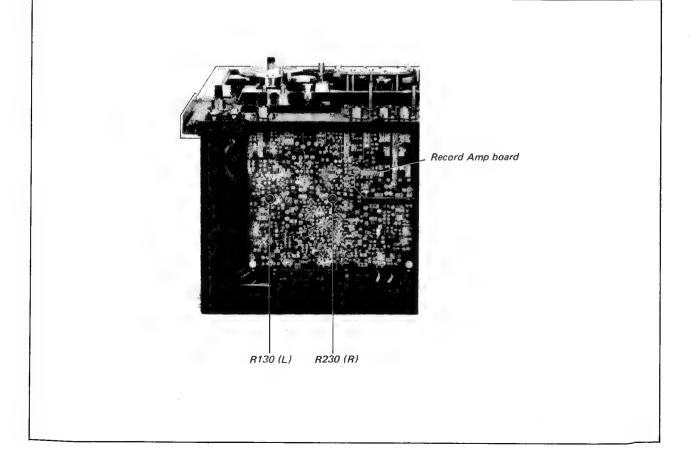




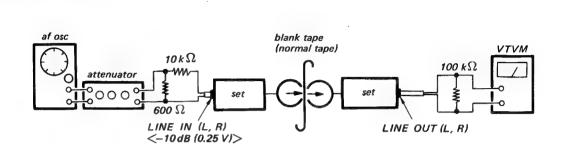
4-11. RECORD LEVEL ADJUSTMENT



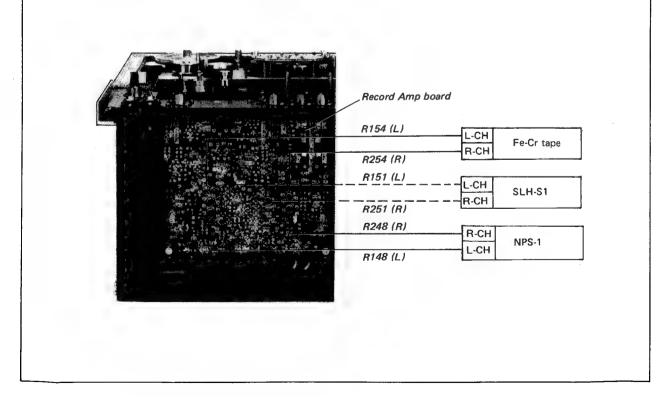
Adjust	VTVM Reading
R130 (L-CH) R230 (R-CH)	-5 dB (0.44 V)



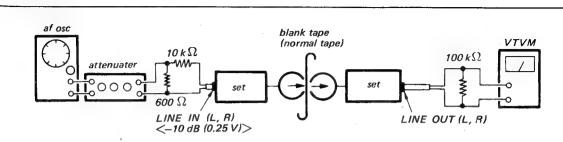
4-12. RECORDING EQUALIZER MID-RANGE ADJUSTMENT



Step	Blank Tape	EQ Switch Setting	Input Signal Freq.	Adjust	VTVM Reading
1	NPS-1		1 kHz	-	Memorize the reading.
2	(Sony regular tape)	NORMAL	10 kHz	R148 (L-CH) R248 (R-CH)	Same reading as Step 1.
3	SLH-S1		1 kHz	_	Memorize the reading.
4	(Sony SLH tape)	SPECIAL	10 kHz	R151 (L-CH) R251 (R-CH)	Same reading as Step 3.
5			1 kHz	_	Memorize the reading.
6	Sony Fe-Cr tape	Fe-Cr	10 kHz	R154 (L-CH) R254 (R-CH)	Same reading as Step 5.



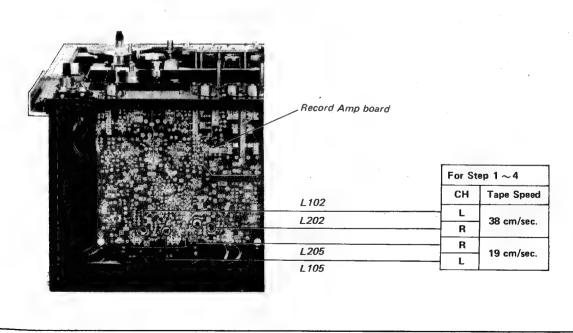
4-13. RECORDING EQUALIZER HIGH-RANGE ADJUSTMENT

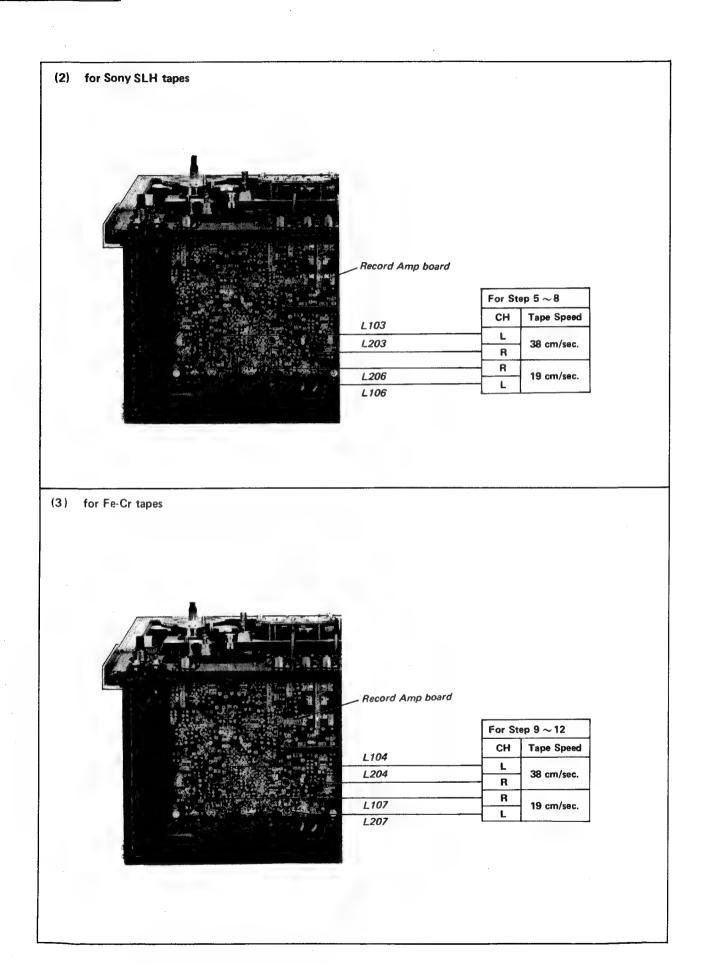


Step	Blank Tape	EQ Switch Setting	Tape Speed	Input Signal Freq.	Adjust	VTVM Reading										
1			19 cm/s	1 kHz		Memorize the reading.										
2	NDC 1		(7½ ips)	20 kHz	L105 (L-CH)	Same reading as Step 1										
	NPS-1	NORMAL	(//2 ipo/	30 kHz	L205 (R-CH)	Same reading as Step										
3	(Sony normal tape)		38 cm/s	1 kHz		Memorize the reading.										
4			(15 inc)	20 kHz	L102 (L-CH)	C 1: C										
			(15 ips)	30 kHz	L202 (R-CH)	Same reading as Step 3										
5			19 cm/s	1 kHz		Memorize the reading.										
6			$(7\frac{1}{2} \text{ ips})$	25 kHz	L206 (L-CH)	0 11 0										
	SLH-S1	SPECIAL	(7/2 lps)	35 kHz	L106 (R-CH)	Same reading as Step										
7	(Sony SLH tape)								38 cm/s	1 kHz	:	Memorize the reading.				
8																
			(15 ips)	35 kHz	L203 (R-CH)	Same reading as Step										
9			19 cm/s	1 kHz		Memorize the reading.										
10				30 kHz	L207 (L-CH)	C 1: C1 1										
	Sony Fe-Cr tape Fe-Cr	$(7\frac{1}{2} \text{ ips})$	40 kHz	L107 (R-CH)	Same reading as Step 9											
11			38 cm/s	1 kHz		Memorize the reading.										
12			(15 ips)	30 kHz	L104 (L-CH)	C										
14			(15 lbs)	40 kHz	L204 (R-CH)	Same reading as Step										

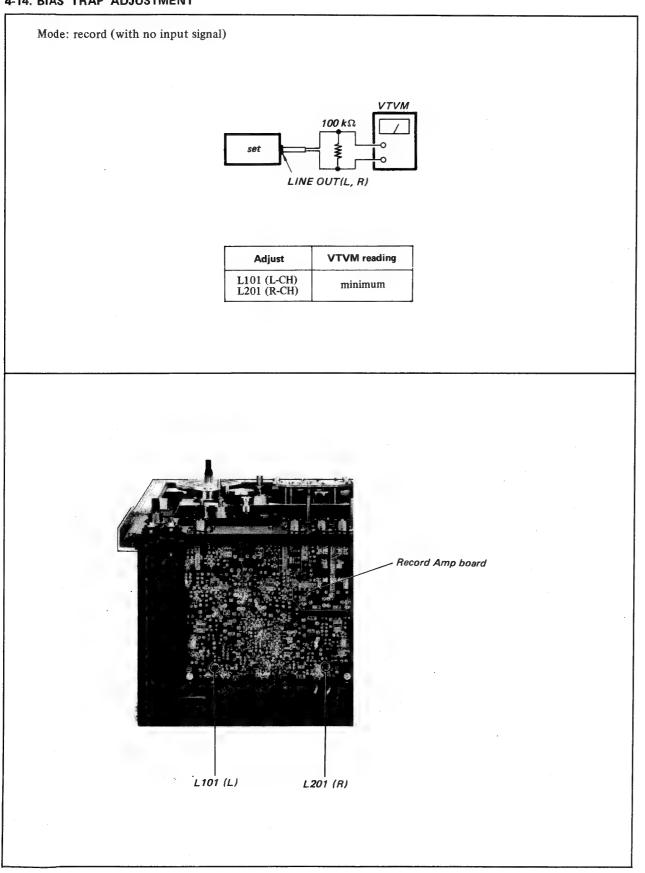
Note: After the recording equalizer adjustments, perform the recording level adjustment again.

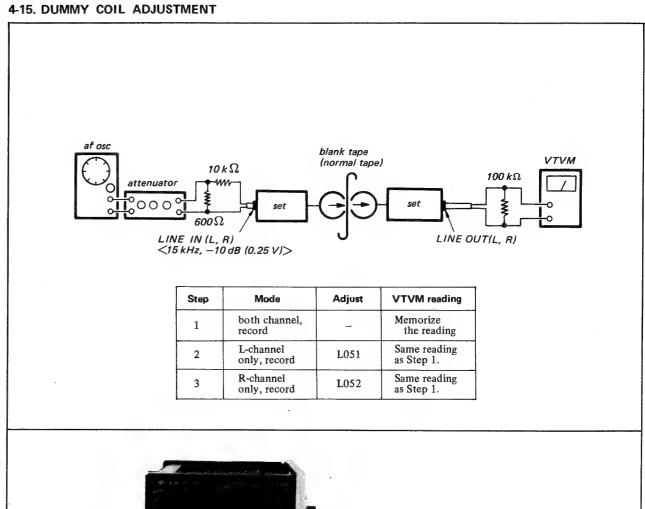
(1) for normal tapes (Sony PR)

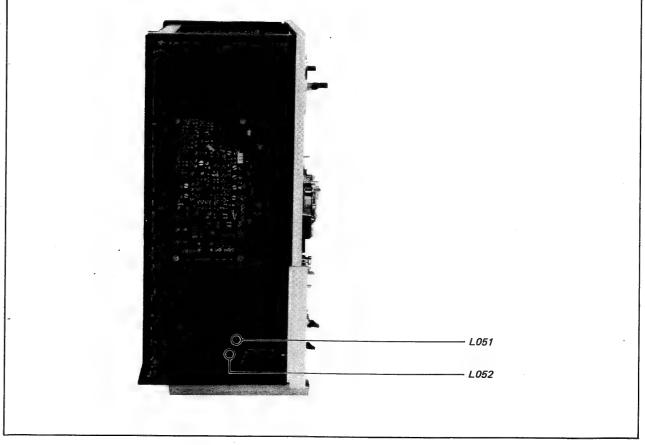




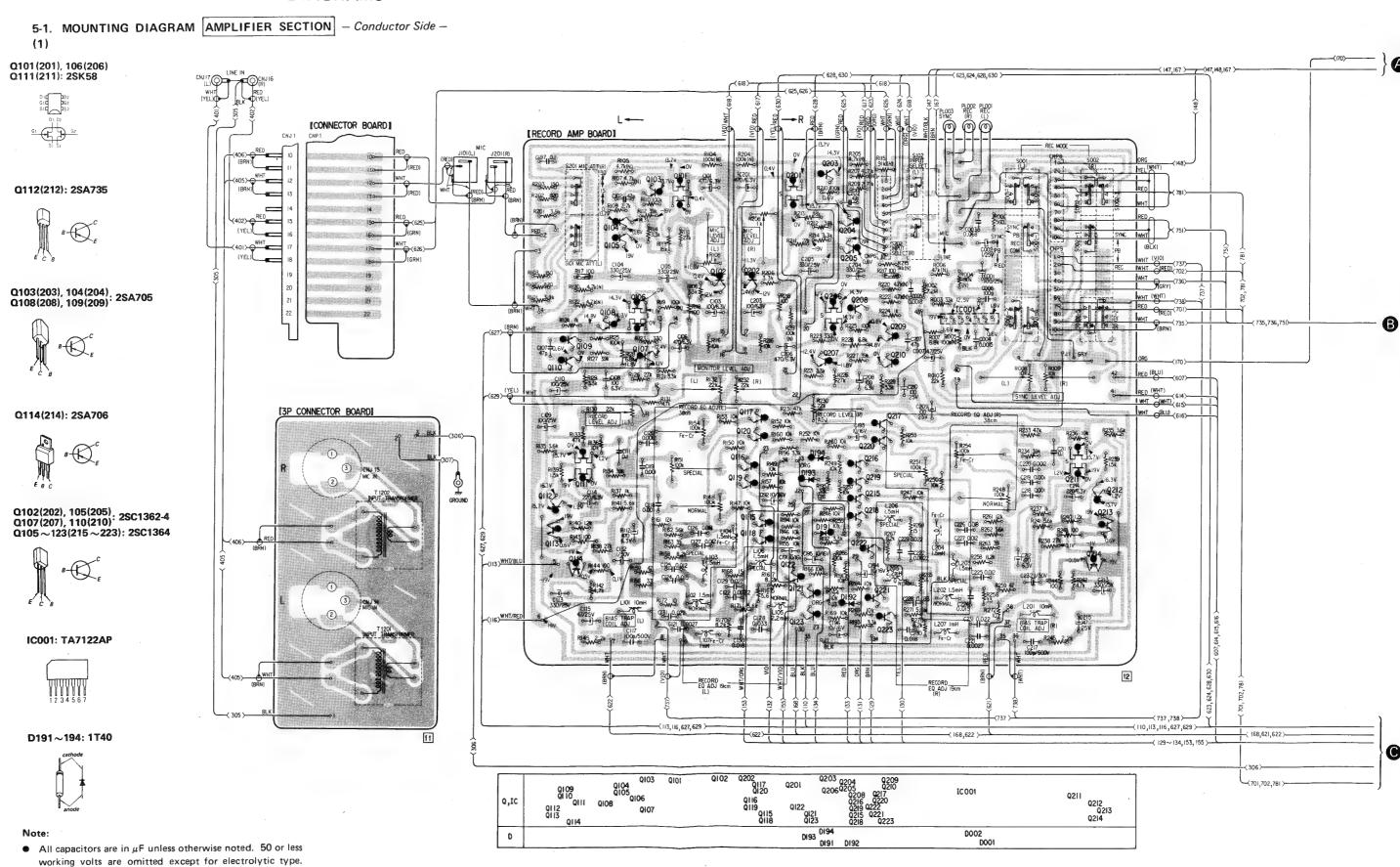
4-14. BIAS TRAP ADJUSTMENT







SECTION 5 DIAGRAMS

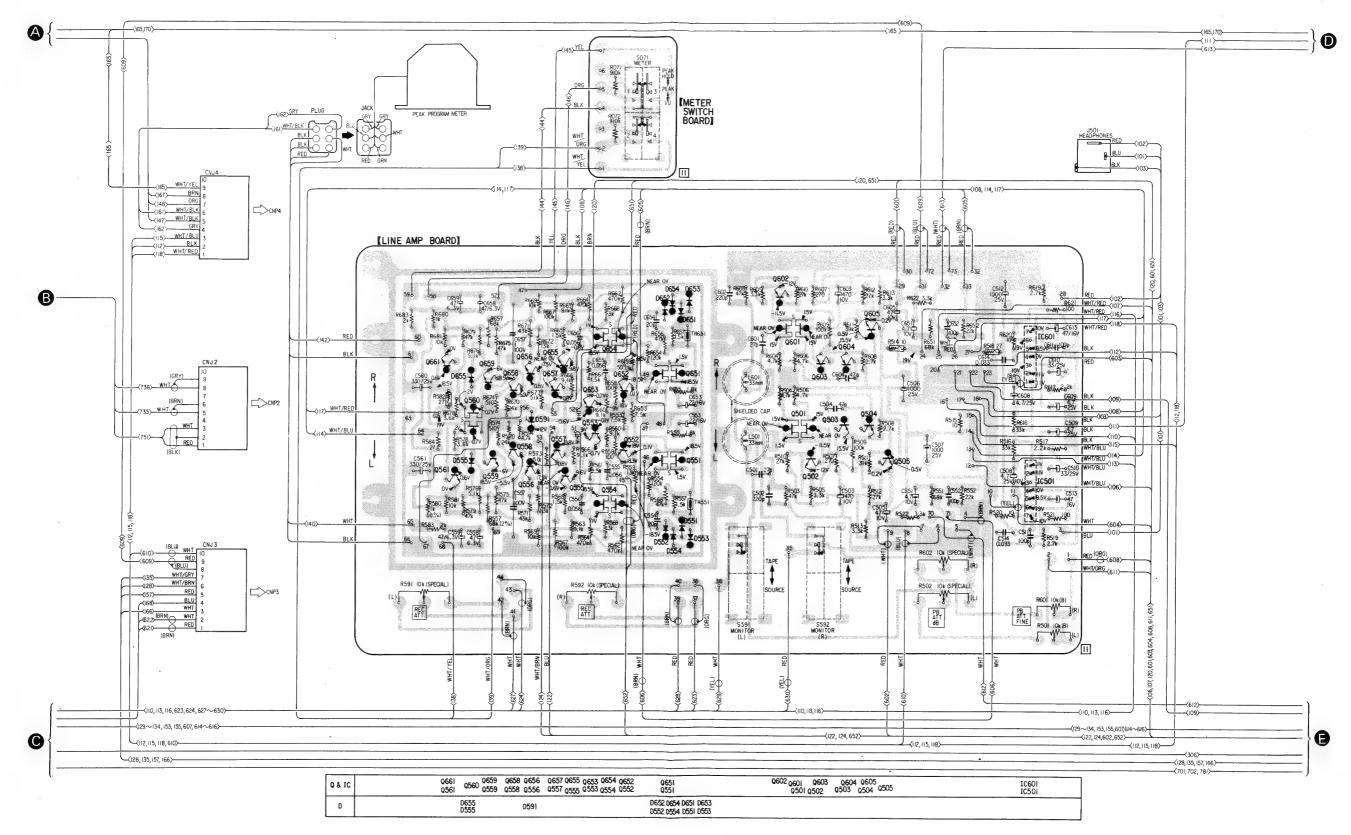


 $p = \mu \mu F$.

portion of shielded wire.

• Color in () indicates color of sleeving over the end

(2)



Q501(601), 551(651) Q554(654), 560: 2SK58

Q502(602): 2SC1362-4 Q503(603), 504(604) Q552(652), 558(658): 2SA735 Q552(652), 558(658): 2SA735

D551(651), 553(653): 1S1555 D552(652), 554(654): 1T22A IC501(601): TA7066P

D591(691): MZ12 D555(655): 10D2

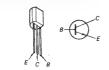




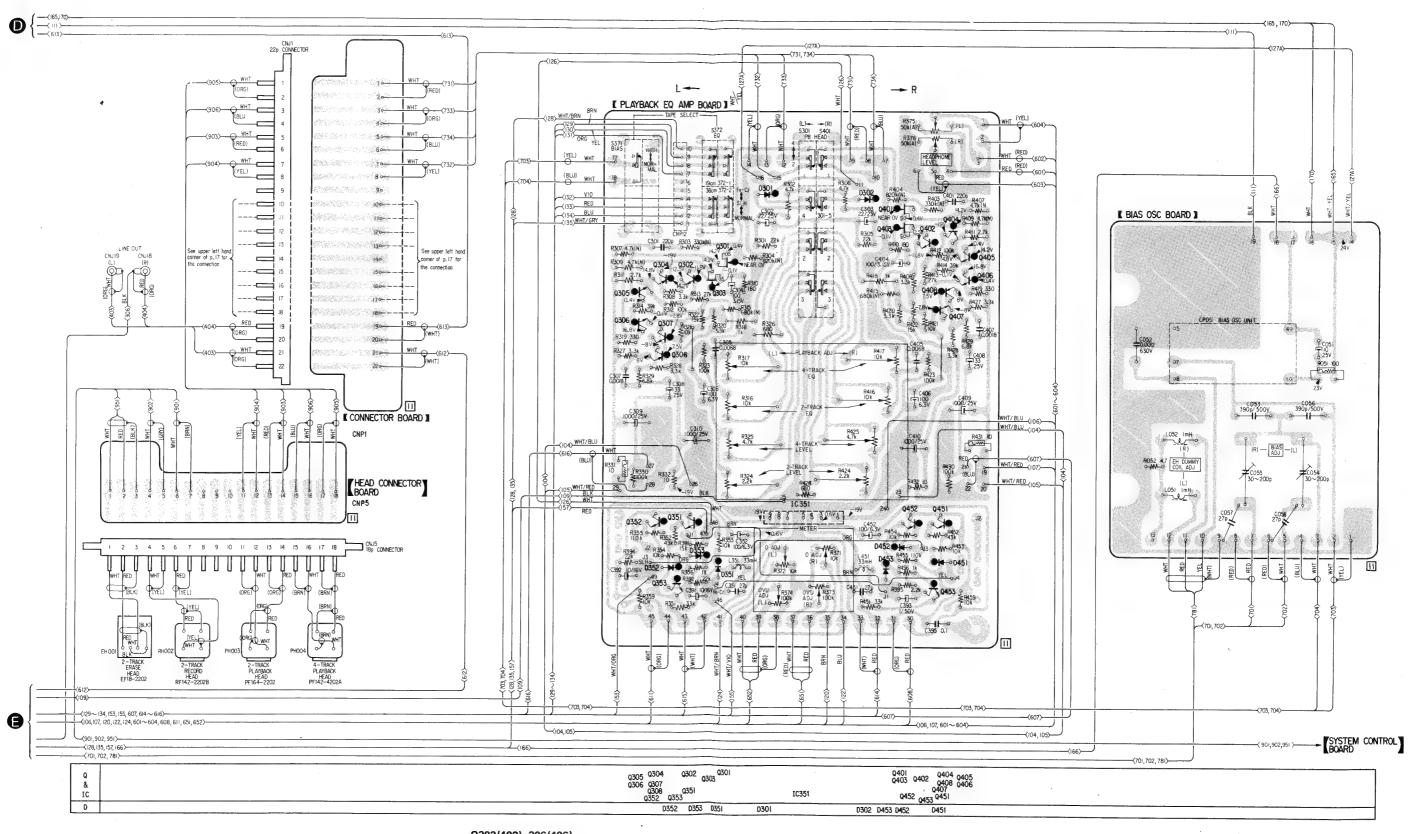
- All capacitors are in μF unless otherwise noted. 50 or less working volts are omitted except for electrolytic type. $p = \mu \mu F$.
- Color in () indicates color of sleeving over the end portion of shielded wire.











Q302(402), 306(406) Q307(407): 2SC1362-4 Q304(404), 305(405): 2SA705 Q351~353(451~453): 2SC1364 IC351: BX270A

D301, 302 D351 ~353(451 ~453): 1T40

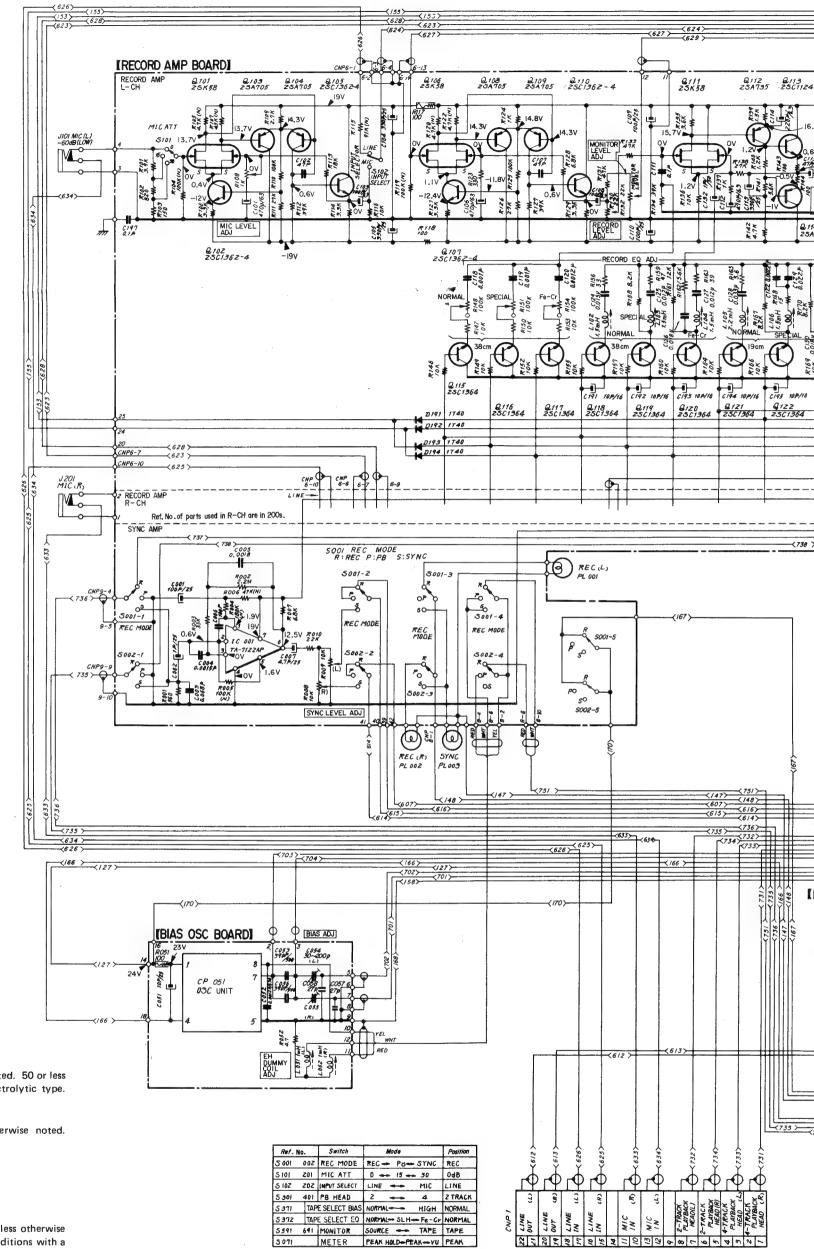


Q301(401), 303(403): 2SK43 Q308(408): 2SA735



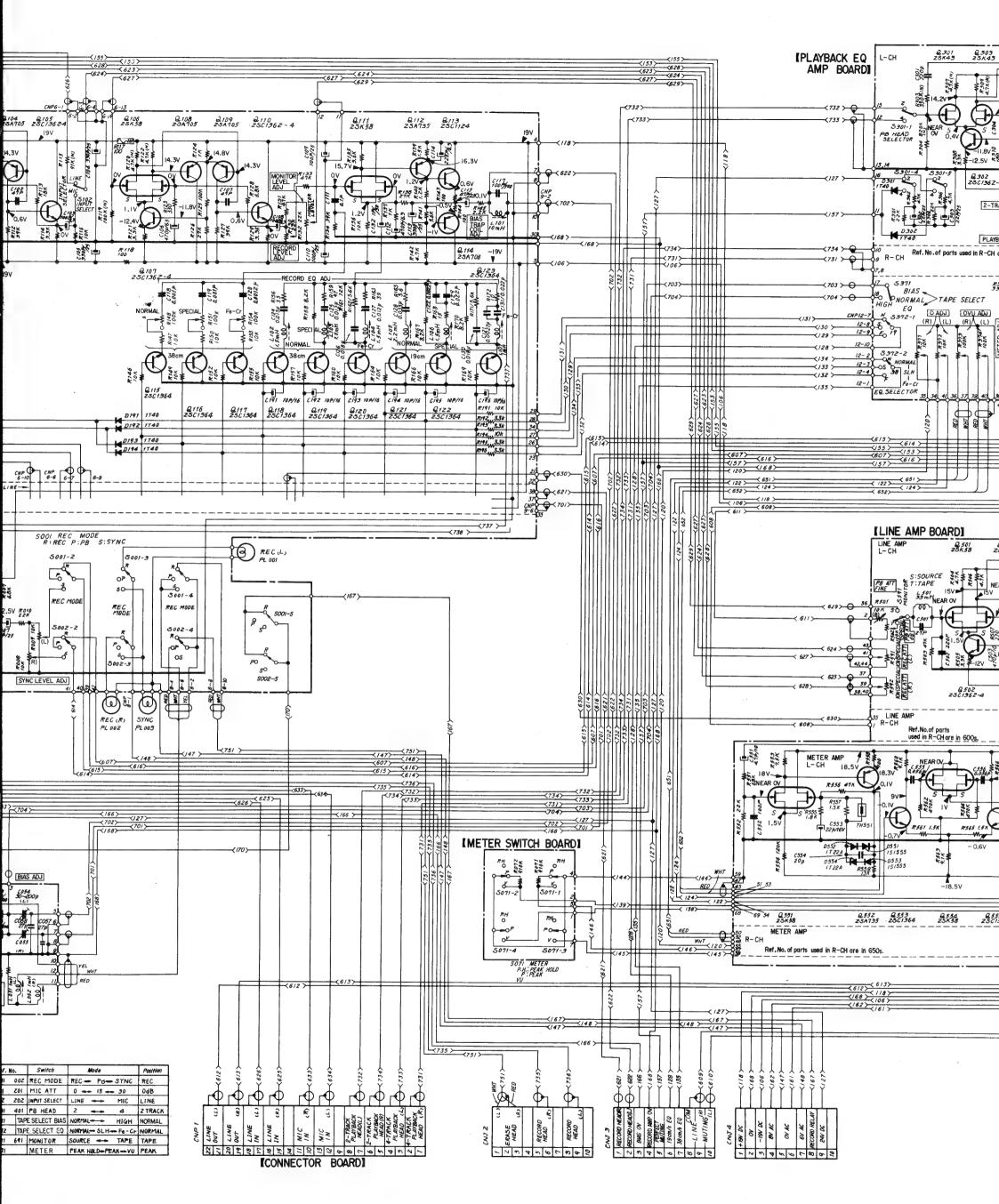
Note:

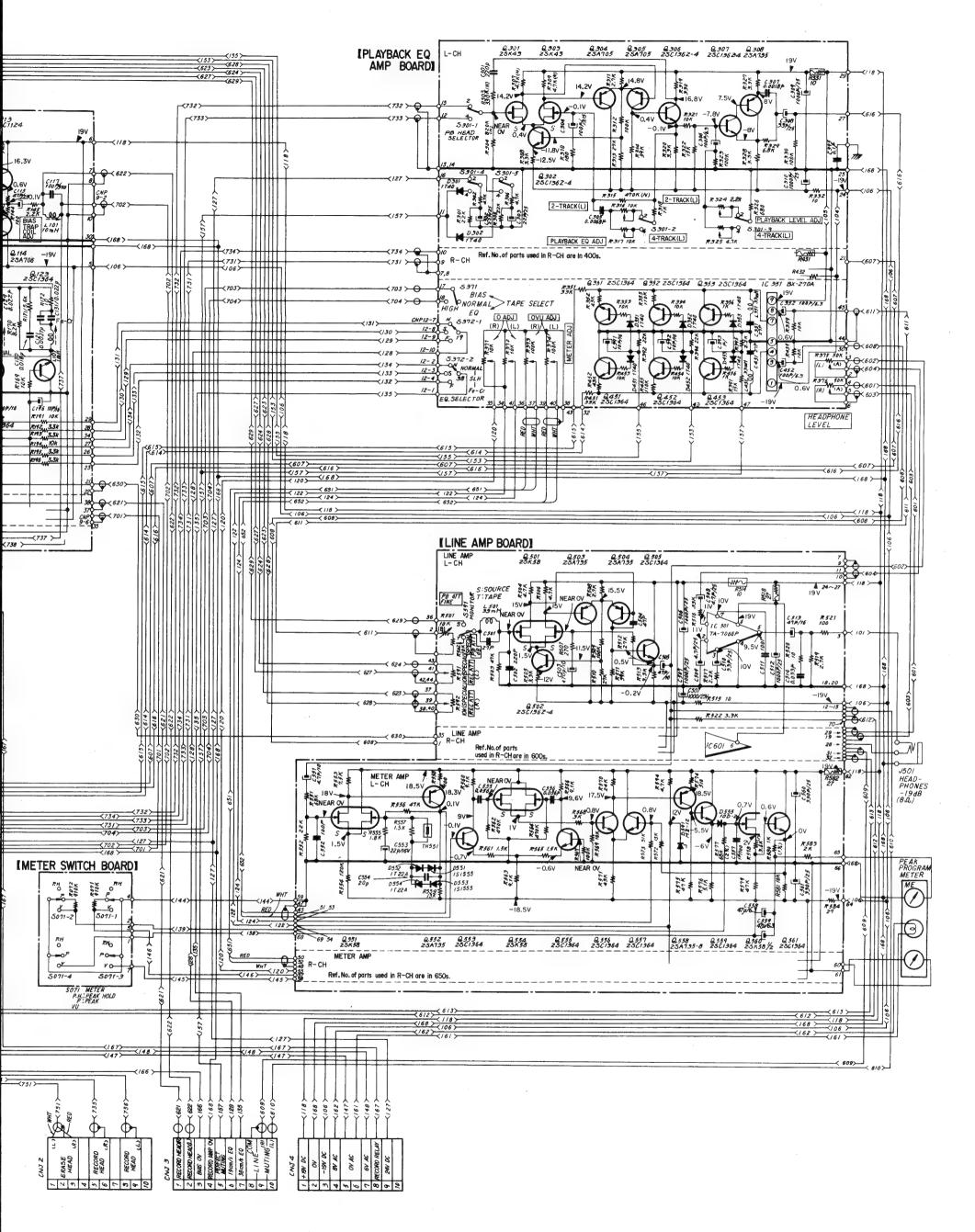
- All capacitors are in μF unless otherwise noted. 50 or less working volts are omitted except for electrolytic type.
- Color in () indicates color of sleeving over the end portion of shielded wire.

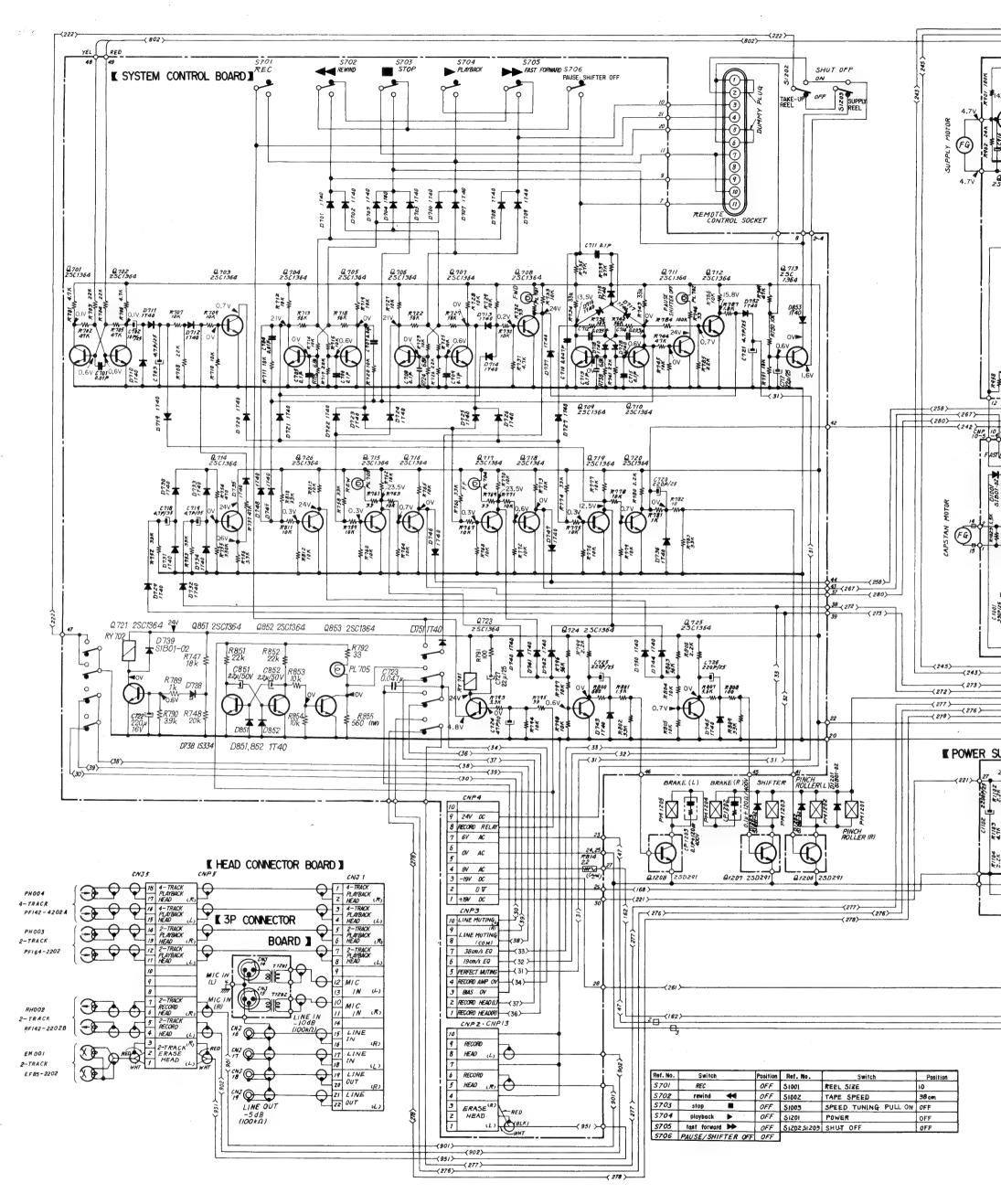


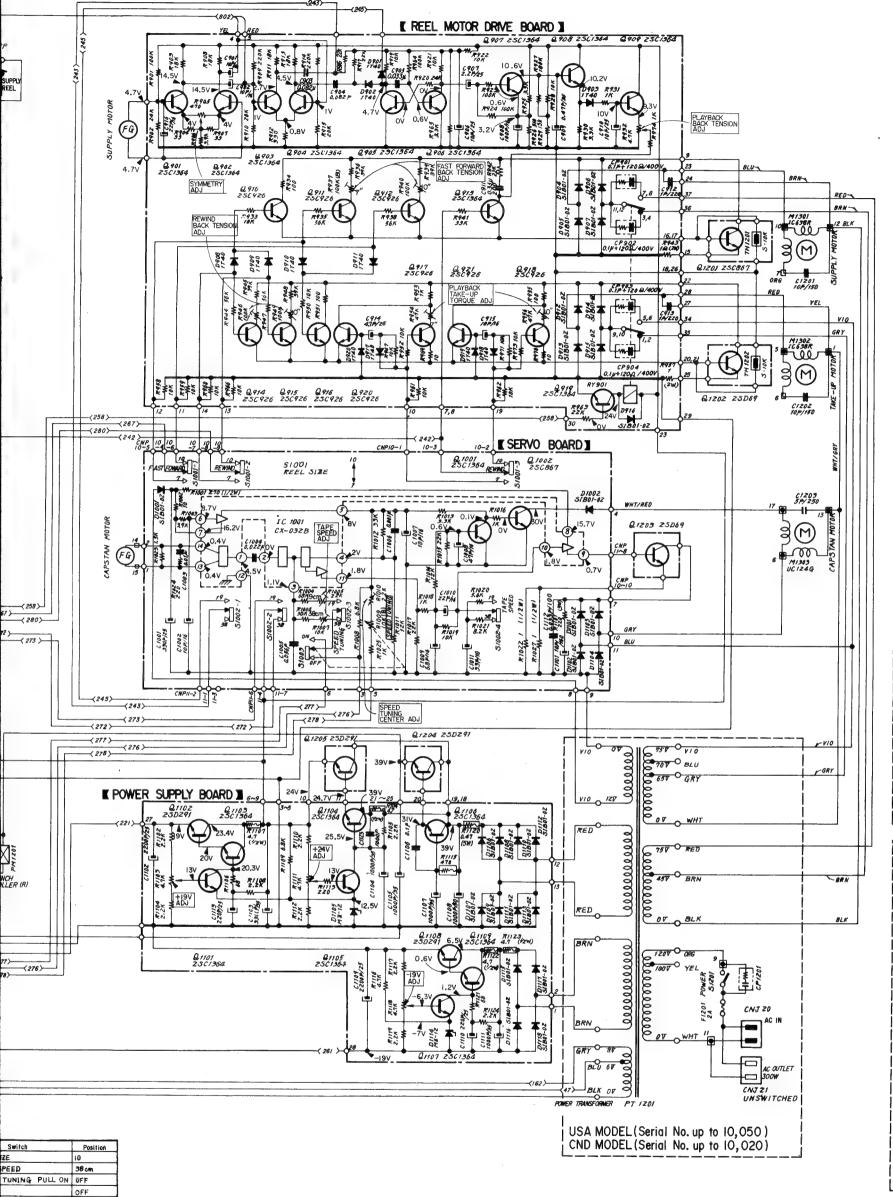
- All capacitors are in F unless otherwise noted. 50 or less working volts are omitted except for electrolytic type.
- $(p = \mu\mu F)$ Ex. $\bigcirc\bigcirc\bigcirc\mu/\bigcirc\bigcirc=\bigcirc\bigcirc\mu F/\bigcirc\bigcirc V$ ullet All resistors are in Ω , ${}^{1}\!\!\!/\!\!\!/ W$, unless otherwise noted.
- k = 1,000 M = 1,000 k(R000 (Rooo)
- $= \left\{ \begin{array}{c} \bigcirc \bigcirc \mathsf{k} \Omega \\ (\pm \bigcirc \%) \end{array} \right\}$ (0%)
- indicates chassis ground.
- (N): indicates a low-noise resistor.
- Voltages are DC with respect to ground unless otherwise noted. Readings taken under no-signal conditions with a VOM (20 $k\Omega/V$).
- Voltage variations may be noted due to normal production tolerances.

[CONNECTOR BOARD]







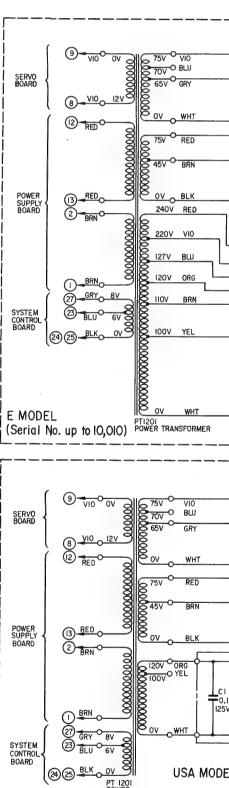


Note:

- All capacitors are in F unless otherw working volts are omitted except f (p = μμF)
- Ex. $\bigcirc\bigcirc\bigcirc\mu/\bigcirc\bigcirc=\bigcirc\bigcirc\mu F/\bigcirc\bigcirc V$ All resistors are in Ω , $\frac{1}{2}W$, unless k = 1,000 M = 1,000 k

$$\left\{ \begin{array}{l} \mathsf{ROOO} \\ \mathsf{OOk} \\ (\mathsf{O\%}) \end{array} \right\} = \left\{ \begin{array}{l} \mathsf{ROOO} \\ \mathsf{OOk}\Omega \\ (\pm \mathsf{O\%}) \end{array} \right\}$$

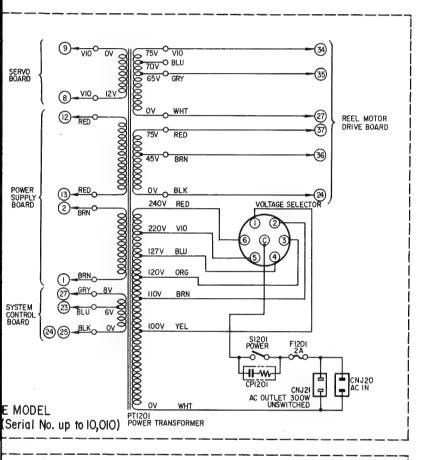
- indicates chassis ground.
- (N): indicates a low-noise resistor.
- Voltages are DC with respect to grounded. Readings taken under no-sign VOM (20 kΩ/V).
- Voltage variations may be no production tolerances.

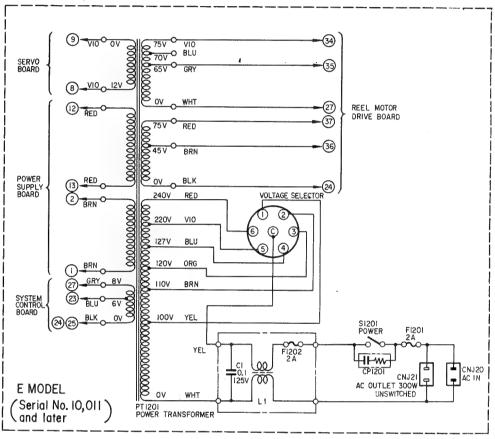


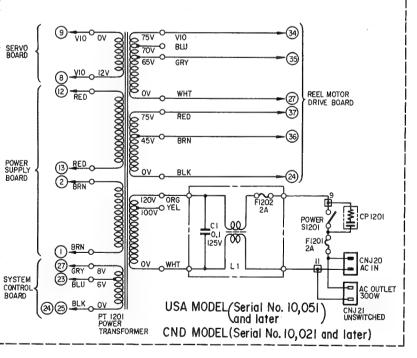
CND MODE

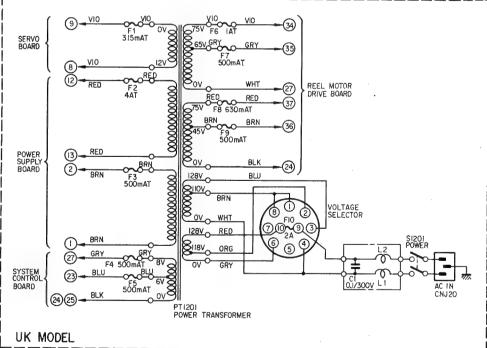
Note:

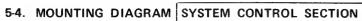
- All capacitors are in F unless otherwise noted. 50 or less working volts are omitted except for electrolytic type. (p = μμF)
 Ex. ΟΟΟμ/ΟΟ = ΟΟΟμF/ΟΟ V
- All resistors are in Ω, ¼W, unless otherwise noted.
 k = 1,000 M = 1,000 k
 - $\left\{
 \begin{array}{l}
 \text{ROOO} \\
 \text{OOk} \\
 \text{(O%)}
 \end{array}
 \right\} = \left\{
 \begin{array}{l}
 \text{ROOO} \\
 \text{OOk}\Omega \\
 \text{(\pmO%)}
 \end{array}
 \right\}$
- indicates chassis ground.
- (N) : indicates a low-noise resistor.
- Voltages are DC with respect to ground unless otherwise noted. Readings taken under no-signal conditions with a VOM (20 k Ω /V).
- Voltage variations may be noted due to normal production tolerances.











Q701 ~721, 723 ~726 Q851 ~853: 2SC1364

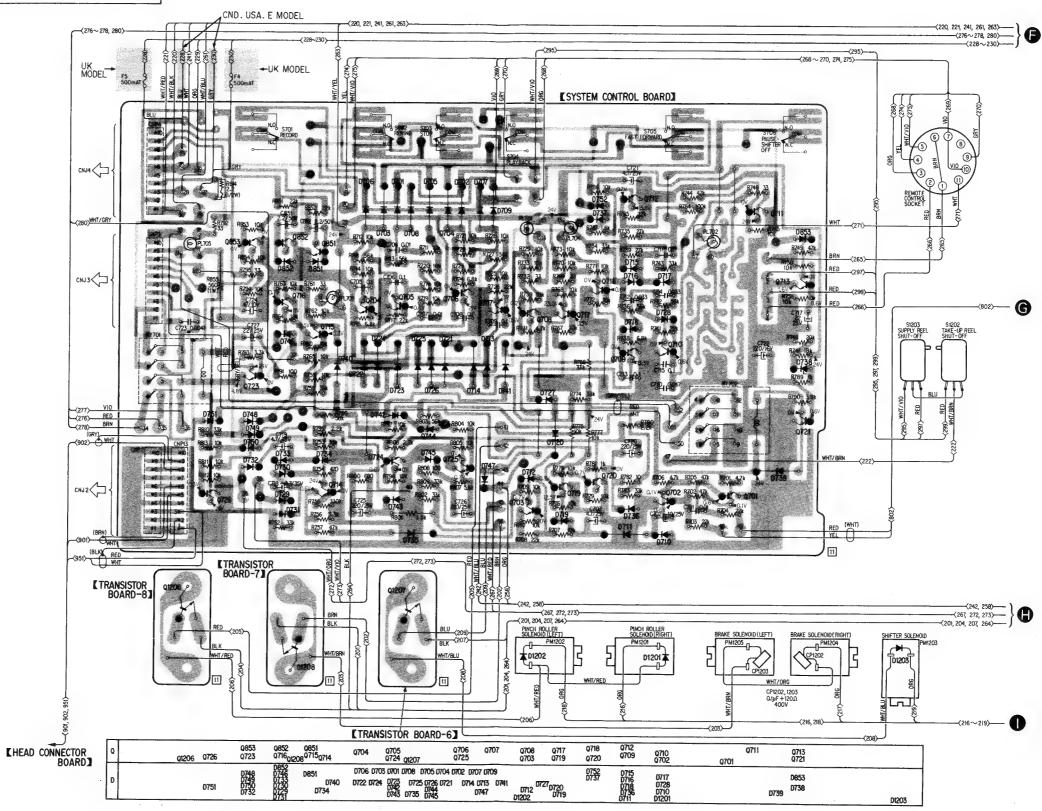


D701 ~737, 740 ~752 D851 ~853: 1T40 D738: 1S334



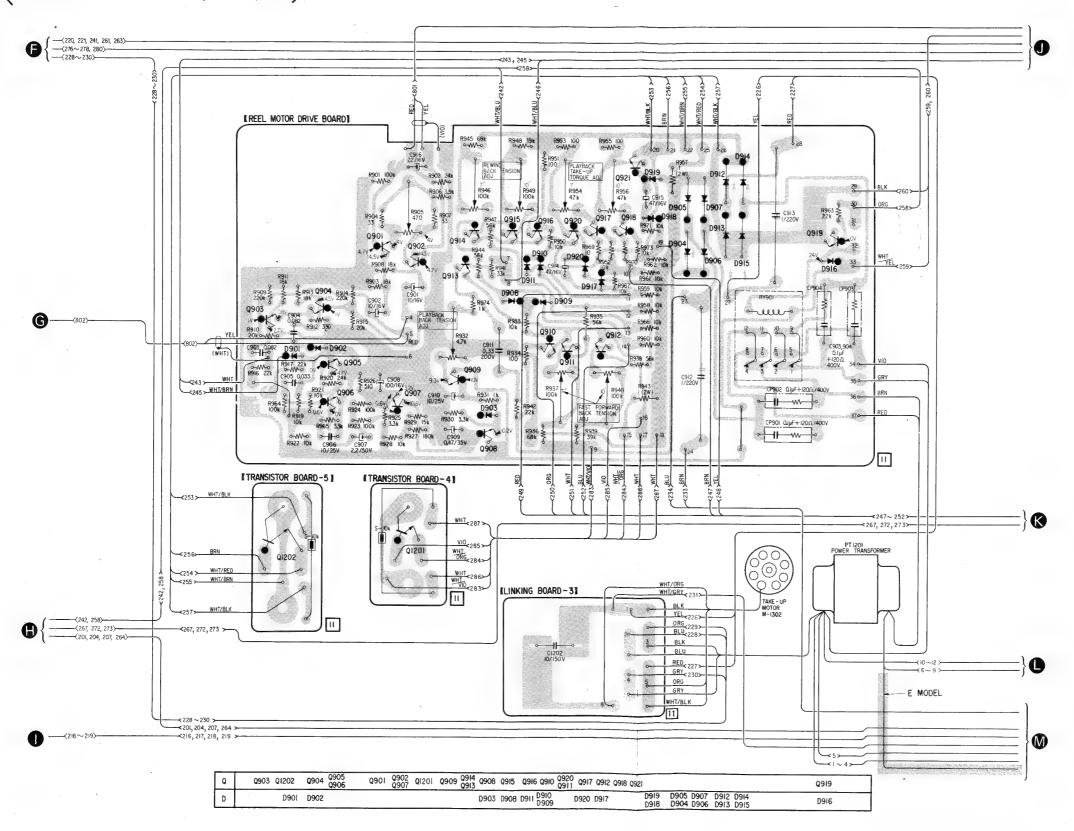
D739: SIB01-02



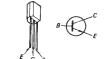


- All capacitors are in μ F unless otherwise noted. 50 or less \bigotimes = Patterns on the conductor and the component sides working volts are omitted except for electrolytic type. $p = \mu \mu F$.
- Color in () indicates color of sleeving over the end portion of shielded wire.
- are connected at this point.
- : component side pattern : conductor side pattern

(2) (USA Model (Serial No. up to 10,050) Canada Model (Serial No. up to 10,020) E Model (Serial No. up to 10,010)



Q901~909, 913, 919: 2SC1364



Q910~912, 914~918 Q920, 921: 2SC926



D901~903, 908~911 D917~920: 1T40

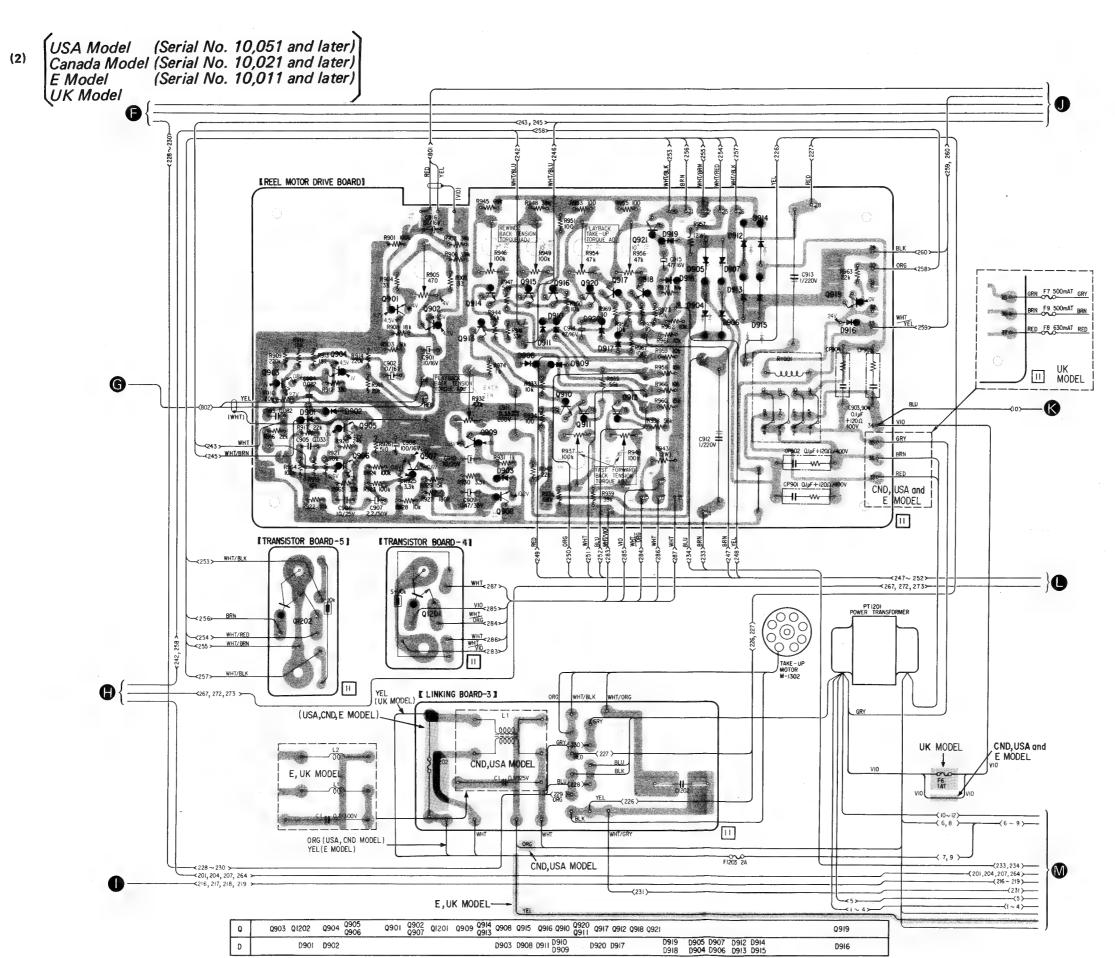


D904 \sim 907, 912 \sim 916: SIB01-02

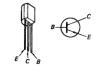


Note:

- All capacitors are in μ F unless otherwise not@d. 50 or less working volts are omitted except for electrolytic type. $p = \mu \mu$ F.
- Color in () indicates color of sleeving over the end portion of shielded wire.



Q901~909, 913, 919: 2SC1364



Q910~912, 914~918 Q920, 921: 2SC926



D901~903, 908~911 D917~920: 1T40



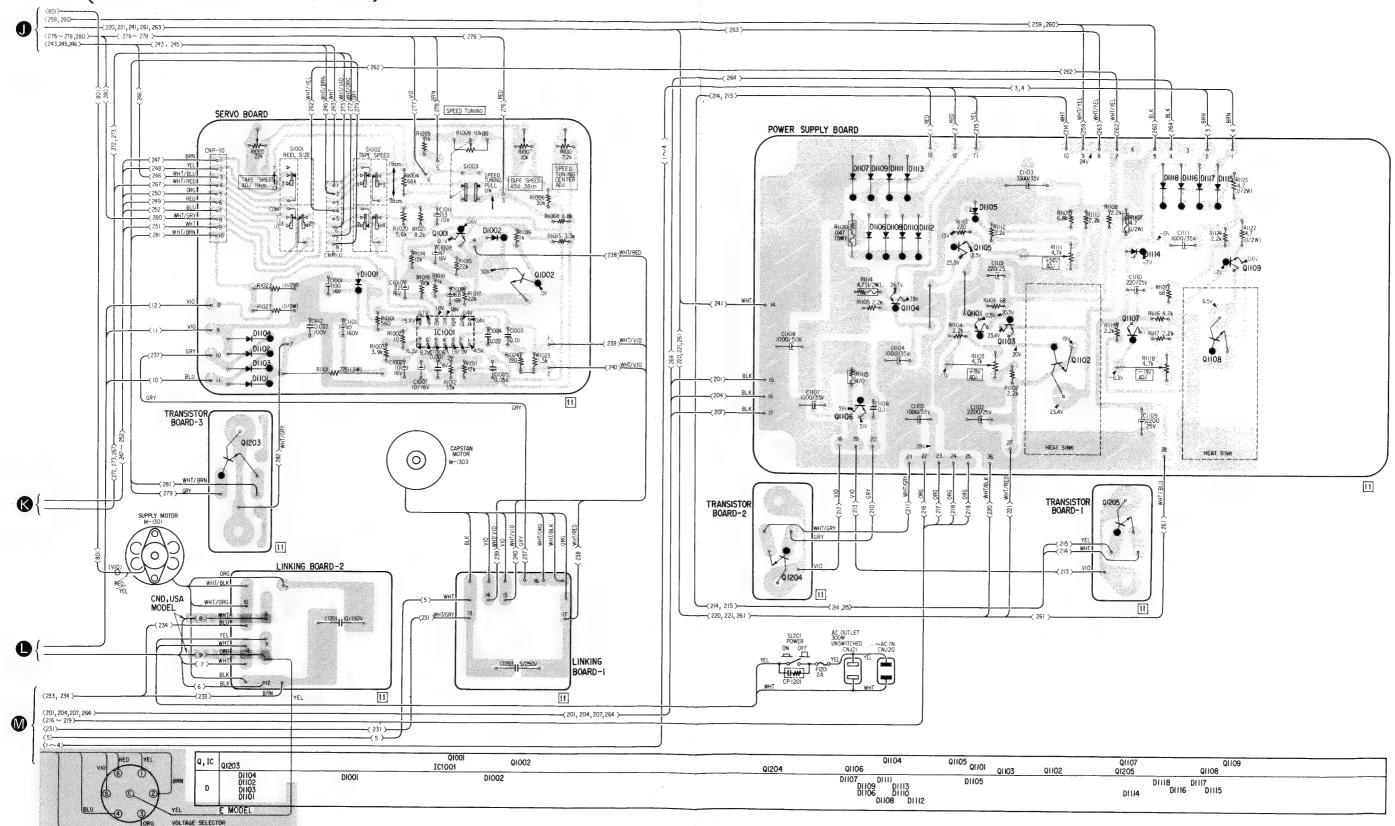
D904~907, 912~916: SIB01-02



Note:

- All capacitors are in μF unless otherwise noted. 50 or less working volts are omitted except for electrolytic type.
 p = μμF.
- Color in () indicates color of sleeving over the end portion of shielded wire.

(3) USA Model (Serial No. up to 10,050) Canada Model (Serial No. up to 10,020) E Model (Serial No. up to 10,010)



Q1001, 1101 Q1002, 1201: 2SC867 Q1103 ~1107, 1109: 2SC1364 Q1102, 1108, 1204 ~1208: 2SD291 Q1202, 1203: 2SD69

IC1001: CX032B

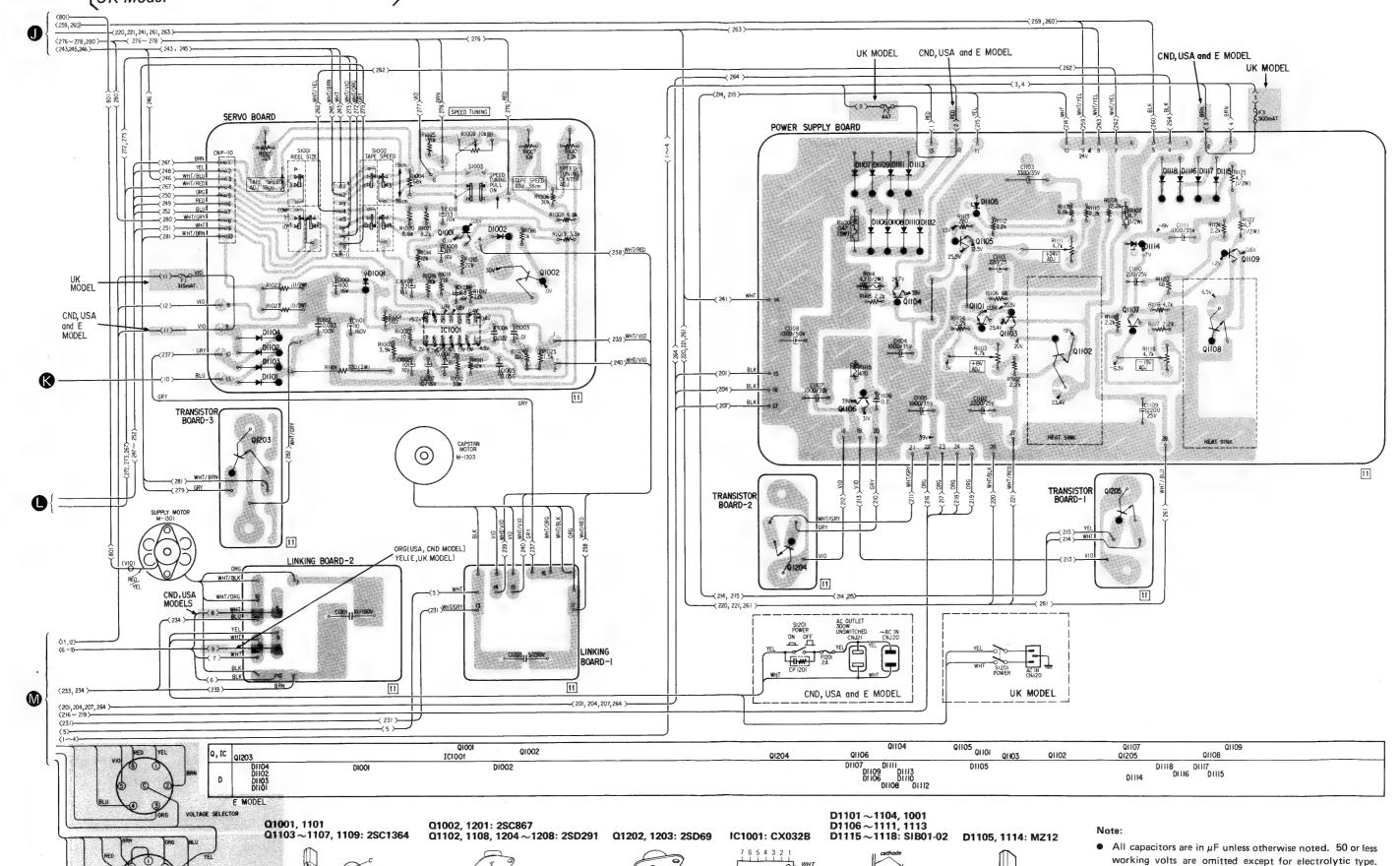
D1101 ~1104, 1001 D1106 ~1111, 1113 D1115 ~1118: SIB01-02 D1105, 1114: MZ12

- All capacitors are in μF unless otherwise noted. 50 or less working volts are omitted except for electrolytic type. $p = \mu \mu F$.
- Color in () indicates color of sleeving over the end portion of shielded wire.



UK MODEL

- 51 -



8 9 10 11 12 13 14

(Top view)

• Color in () indicates color of sleeving over the end

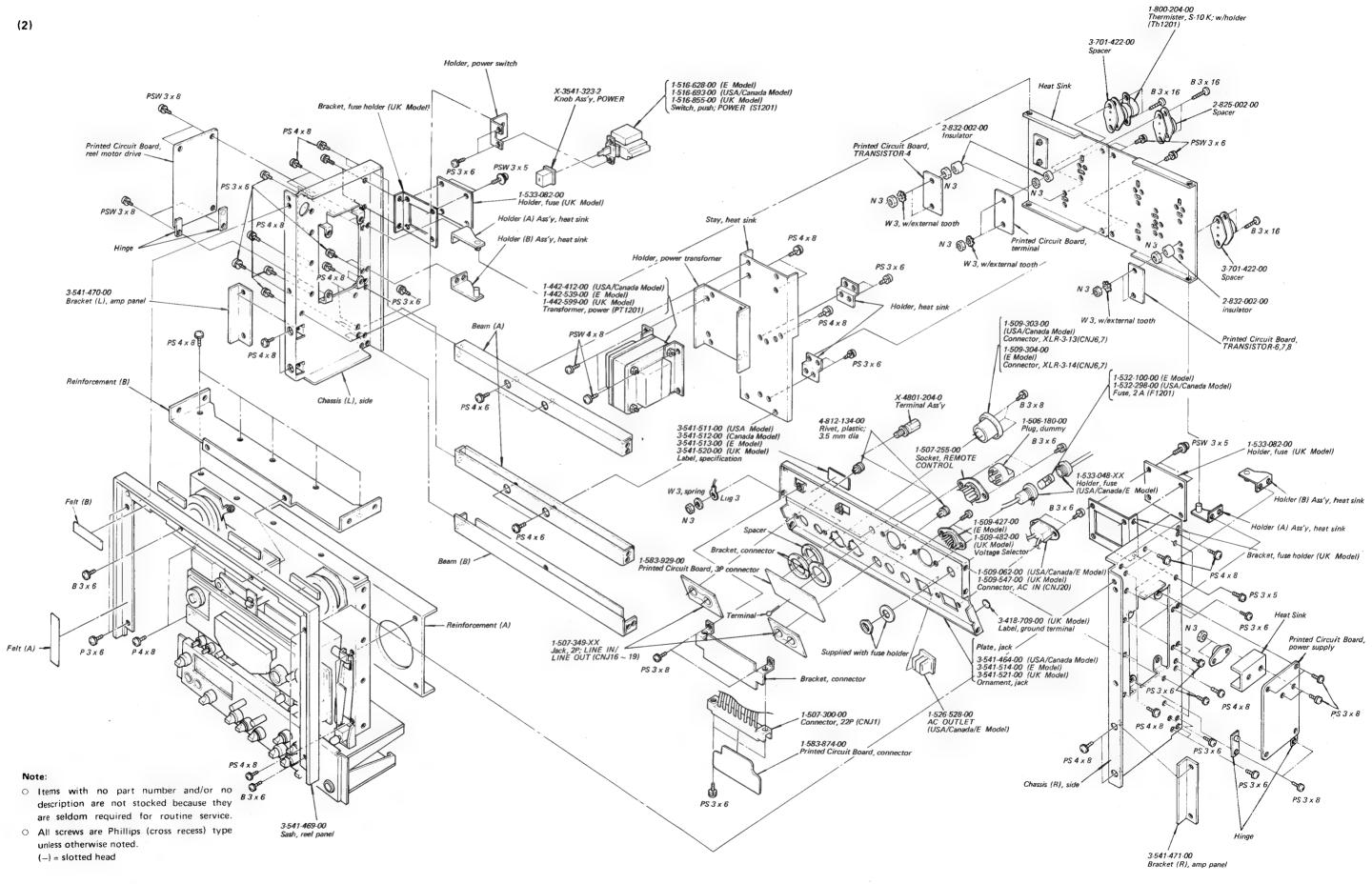
portion of shielded wire.

unless otherwise noted.

(-) = slotted head

X-3541-328-3 Button Ass'y, fast forward

(2)



O All screws are Phillips (cross recess) type

unless otherwise noted.

(-) = slotted head

- 58 -

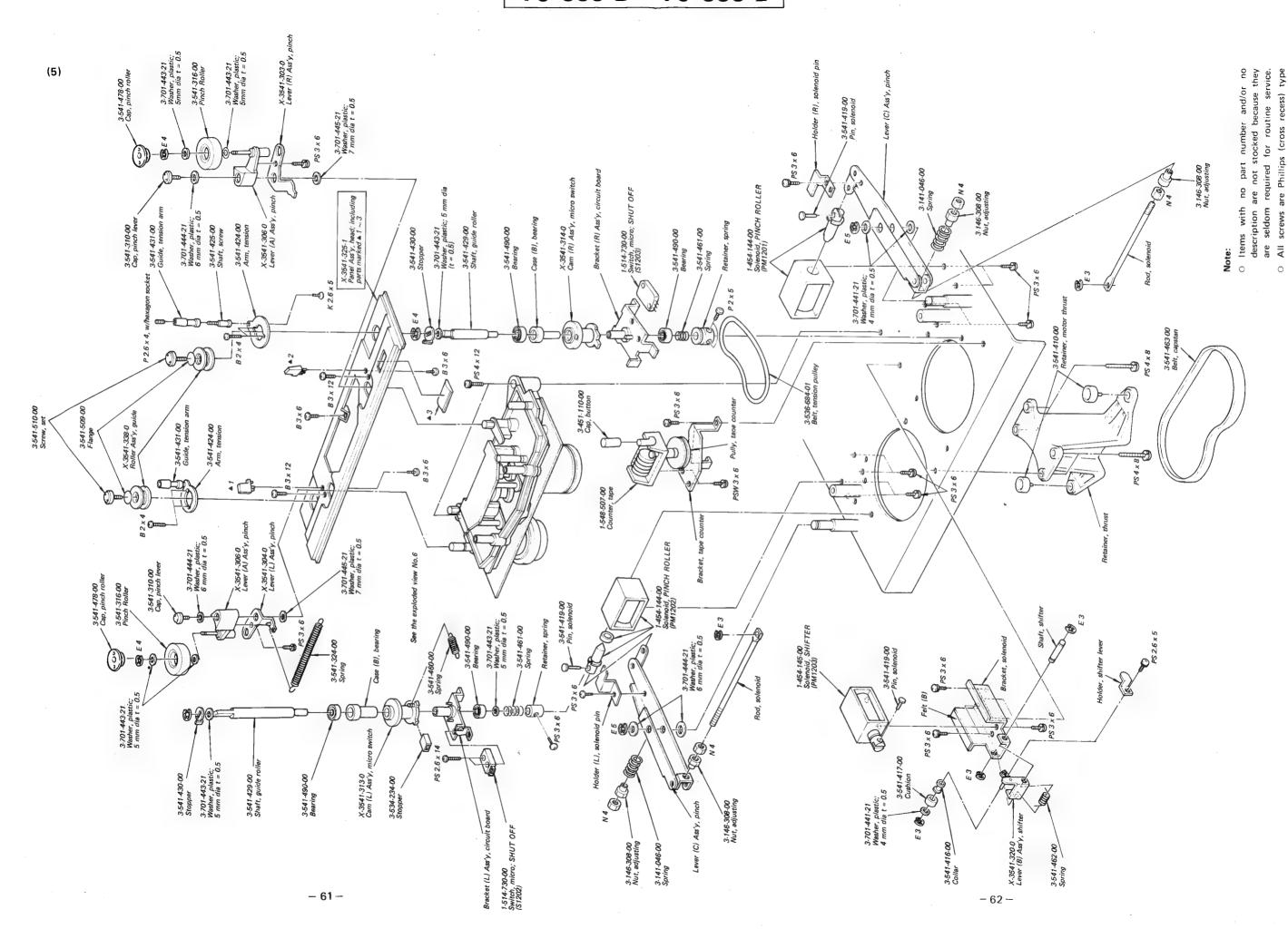
PSW 3 x 6 Printed Circuit Board, bias osc 4-836-127-00 Escutcheon (B), switch 4-836-125-00 Cap, lever-slide switch Printed Circuit Board, meter switch Om Holder (B), circuit boar PS 3 x 6 4-836-144-00 Knob (B), lever-slide switch Holder, meter switch 4-836-127-00 Escutcheon (B), s 83×6 1-507-476-XX Jack, MIC (J101, 201) Chassis, amp PS 3 x 6 Holder (A), jack PS 3 x 6 4-836-144-00 Knob (B), lever-slide switch B3x6/ PSW 3 x 6 PS 3 x 6 Holder (B), jack 90 DE PSW 3 x 6 Supplied with jack Resistor, variable; 50 kΩ; HEADPHONES LEVEL (R375, 376) 1.516.691.00 Switch, lever-slide; PB HEAD (S301, 401) O Items with no part number and/or no description are not stocked because they are seldom required for routine service.

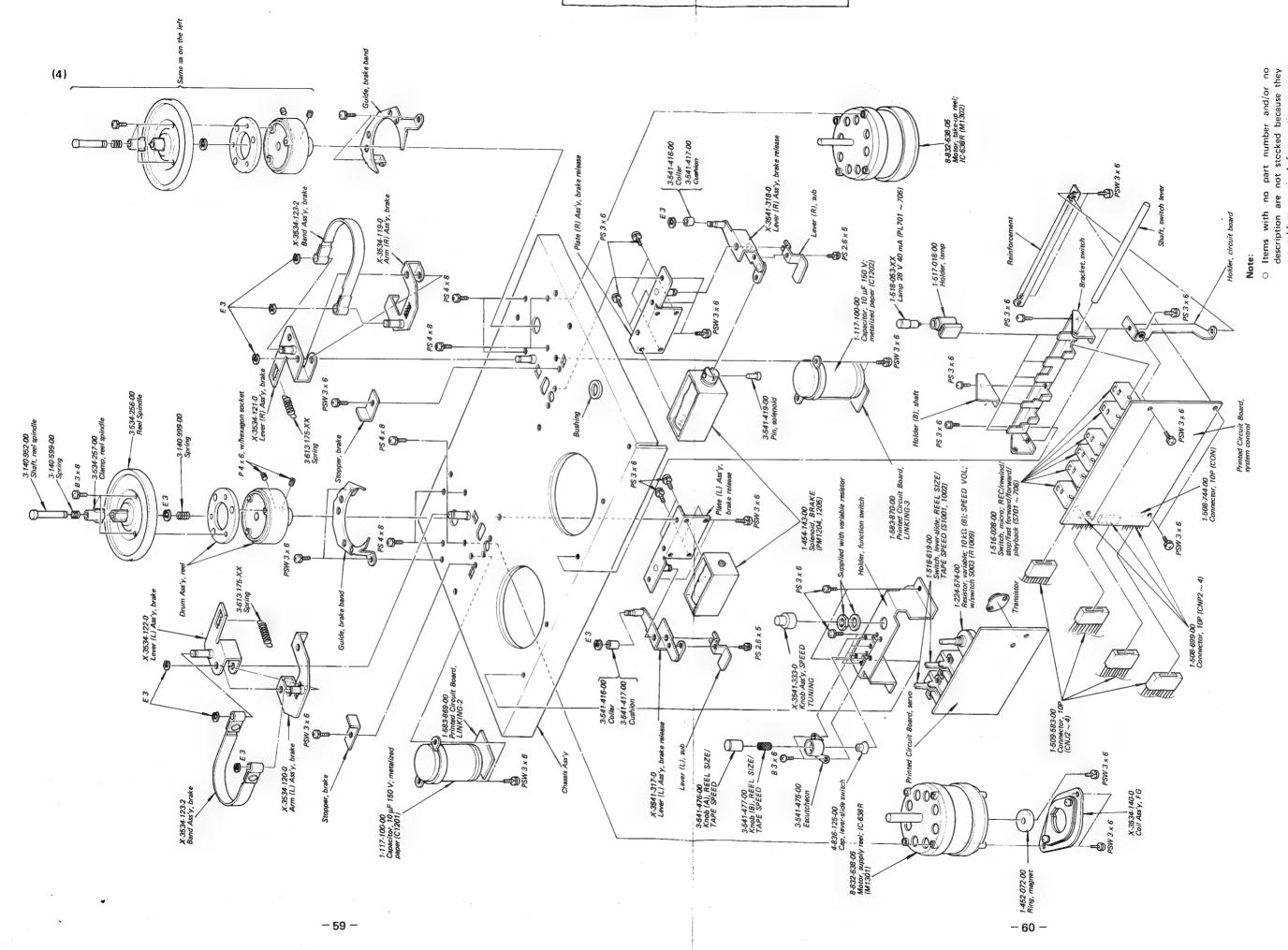
(3)

PSW 3 x 6

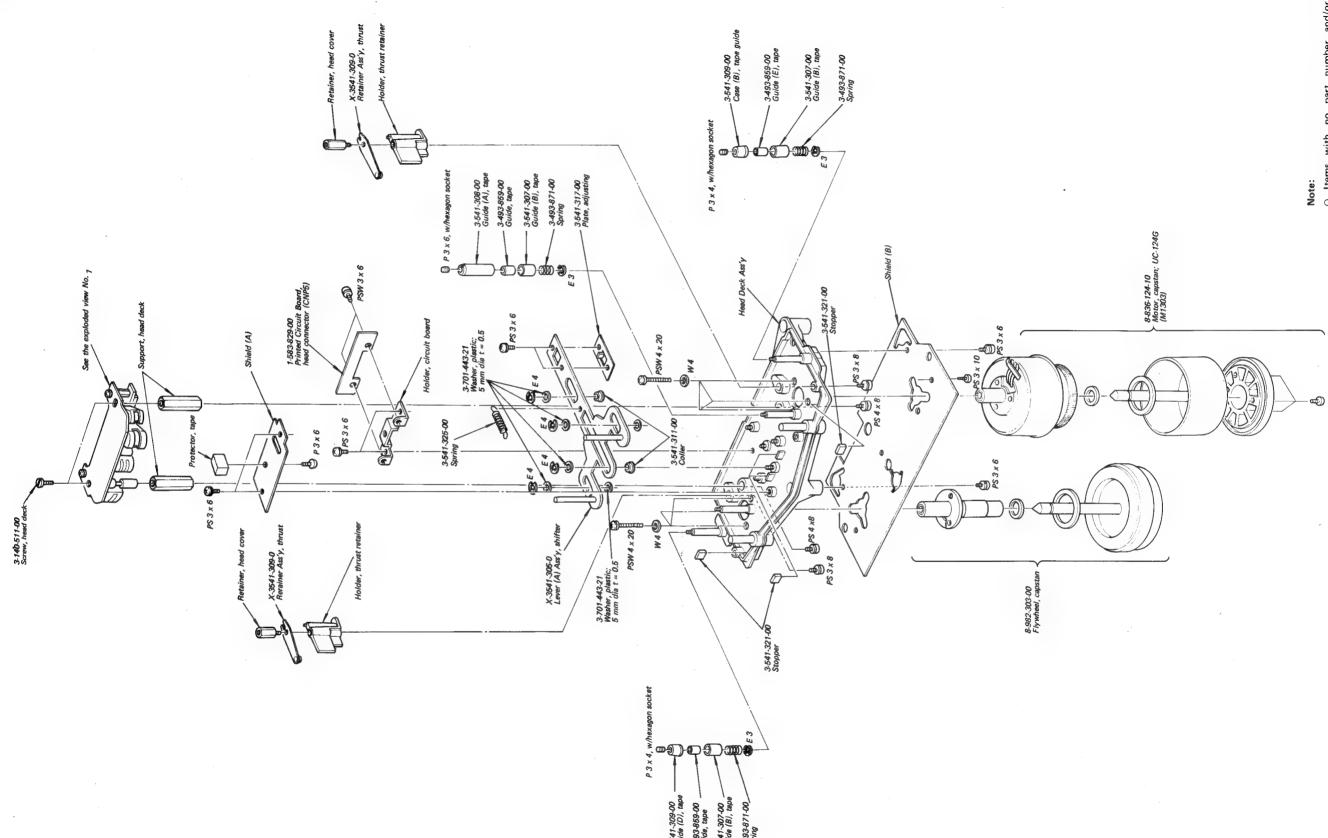
W 3, w/external tooth

- 57 -









 Items with no part number and/or no description are not stocked because they are seldom required for routine service.
 All screws are Phillips (cross recess) type

SECTION 6

PARTS LIST

(7) P 2.6 x 8 (-)SC 3 x 8 P 2.6 x 8 PS 3 x 6 6 6 1-15C3x8 X-3541-308-0 Bearing Ass'y, roller BPS2×6 3-5**41-**312-00 . Shaft, roller € W2 X-3541-307-0 Roller Ass'y PS 2 x 6 3-541-313-00 · Holder, roller Bracket (A), head (P) Ö Bracket (B), head PS 3 x 6 3-541-306-00 Guide (A), tape 8-825-636-10 Head, playback; PF142-42024 (PH004) PS 2 x 6 8-825-638-00 Head, playback; PF164-2202 (PH003) Bracket, record head @ W3 3-531-526-11 -Spacer 3-493-870-00 Spring W3 8-825-558-10 Head, record; RF142-22028 (RH002) 3-437-173-00 Screw, head adjusting 3-141-019-05 Adaptor N 3 1-509-668-00 Connector, 18P (CNJ5) 3-141-020-02 ^{*} Spacer t = 0.2 Note: 8-828-522-20 Head, erase; EF18-2202 (EH001) O Items with no part number and/or no description are not stocked because they

Ref. No. Part No.	Description	Ref. No. Part No.	Description
PRINTED CI	RCUIT BOARDS	Q501, 601	2SK58
		Q502, 602	2SC1362-4
	ad Connector (CNP5) NKING - 2	Q503, 603	
		Q504, 604)	2SA735
	NKING-3 Serial No. up to 10,050)	Q505, 605	2SC1364
	lel Serial No. up to 10,020)		
	erial No. up to 10,010)	Q551, 651	2SK58
	NKING-3	Q552, 652	2SA735
	Serial No. 10,051 and later)	Q553, 653	2SC1364
	lel Serial No. 10,021 and later)	Q554, 654	2SK58
	rial No. 10,011 and later)	$Q555 \sim 557$	2SC1364
(UK Model)	1 (10. 10,011 and mor)	$Q655 \sim 657'$	2501501
	nnector (CNJ1)		
	Connector	Q558, 658	2SA735
		Q559, 659	2SC1364
SEMICO	cord Amp NDUCTORS	Q560	2SK58
Trai	nsistors	Q561, 661	2SC1364
Q101; 201	2SK58	Q701 \sim 721	
Q102, 202	2SC1362-4	$Q723 \sim 726'$	2SC 1364
Q103, 203	2SA 705		
Q104, 204'	251 703	Q851 \sim 853	2SC1364
Q105, 205	2SC1362-4		
		Q901 \sim 909	2SC1364
Q106, 206	2SK58	Q910~912	2SC926
Q107, 207	2SC1362-4	Q913	2SC1364
Q108, 208	2SA 705	Q914 ~ 918	2SC926
Q109, 209'	2511.00	Q919	2SC1364
Q110, 210	2SC1362-4	Q920, 921	2SC926
0111 011	201/20	Q1001	2SC1364
Q111, 211	2SK58	Q1002	2SC867
Q112, 212	2SA735	Q1002	25007
Q113, 213	2SC1124	Q1101	2SC1364
Q114, 214	2SA706	Q1101	2SD 291
Q115 ~ 123	2SC1364	$Q1102$ $Q1103 \sim 1107$	2SC1364
Q215 ~ 223'		Q1108	2SD291
Q301, 401	201/42	Q1109	2SC1364
Q301, 4 01	2SK43	21103	2501504
Q302, 402	2SC1362-4	Q1201	2SC867
Q303, 403	2SK43	Q1202, 1203	2SD69
Q304, 404	ZURTJ	Q1204 ~ 1208	2SD 291
Q305, 405)	2SA 705		
,			Diodes
Q306, 406			
Q307, 407)	2SC1362-4	D191 ~ 194	1T40
Q308, 408	2SA735		
Q351~353		D301, 302	
$Q451 \sim 453$	2SC1364	D351 ~ 353	1T40
		D451~453	
	ı		

are seldom required for routine service.

O All screws are Phillips (cross recess) type

unless otherwise noted.
(--) = slotted head

Ref. No. Part No.	Description	Ref. No.	Part No.	Descrip	tion	
		L051, 052	1-407-284-00	Variable	induct	or, 1 mH
		L101, 201	1-407-290-11			or, 10 mH
D551, 651	1S1555	L102 ~ 10	4	37 1-1-1	. 1. 4	1.5 mJI
D552, 652	1T22A	$L202 \sim 20$	1-407-268-11	Variable	induct	or, 1.5 mH
D553, 653	181555	L105, 205	1-407-269-11	Variable	e induct	tor, 2.2 mH
D554, 654	1T22A	L106, 206	1-407-268-11	Variable	induct	or, 1.5 mH
D555, 655	10D2	L107, 207	1-407-267-11	Variable	e induct	or, 1.0 mH
D591	MZ12					
		L351, 451	1-407-212-XX	Microin		
D701 ~ 737	1T40	L501, 601	1-407-561-00	Microin	ductor,	33 mH
D738	18334		_			
D739	SIB01-02		Tran	sformers		
$D740 \sim 752$	1T40	T1201 120	2 1 422 205 00			
D851 ~ 853	1T40	11201,120	2 1-423-205-00	Input	(TTO A 100) 1 - 3.6 - 1-1\
D031 ~ 033	1140	D	1-442-412-00			anada Model)
D901~903	1T40	PT1201	1-442-539-00	Power (
D904 ~ 907	SIB01-02		(1-442-399-00	Power	(UK M	odei)
D908~911	1T40		CAR	CITORS		
D912~916	SIB01-02		CAPA	ACITORS		
D917~920	1T40	All canacite	ors are in μ F unles	s otherwis	e indica	ited. 50 or less
		*	its are omitted ex			
D1001, 1002	SIB01-02	_	etrolytic, $p = \mu \mu F$			* 1
$D1101 \sim 1104$	SIB01-02					
D1105	MZ12		γ 1-108-747-11	0.1	125 V	/ mylar
D1106 ~ 1113	SIB01-02		(USA M	Iodel Seria	l No. 10	0,051 and later)
D1114	MZ12	C1	(Canada	Model Ser	ial No. 1	10,021 and later)
D1115 ~ 1118	SIB01-02		(E Mod	el Serial N	o. 10,0	11 and later)
Integra	ited Circuits		1-108-747-22	0.1	300 V	/ mylar
Hitegra	ned Circuits		' (UK Mo	odel)		
IC001	TA7122AP	C001	1-121-416-11	100	25 V	elect
IC351	BX270A	C002	1-131-236-61	1	20 1	solid tantalum
IC501, 601	TA7066P	C003	1-108-599-12	0.068		mylar
IC1001	CX032B	C004	1-108-559-12	0.0015		mylar
		C005	1-108-561-12	0.0018		mylar
The	rmisters	C006	1-102-973-11	100 p		ceramic
	_	C007	1-121-395-11	4.7	25 V	elect
Th551, 651 1-800-349-00	270Ω					
Th1201 1-800-204-00	S-10K (w/holder)	C051	1-121-398-11	10	25 V	
Th1202 1-800-202-XX	S-10K (w/holder)	C052	1-129-703-11	0.0012	630 V	polypropylene
COUCAT	DANCEODMEDO	C053	1-107-183-11	390 p		silvered mica
	RANSFORMERS	C054,055	1-141-034-21	20~120) p	trimmer
	Coils	C056	1-107-183-11	390 p	***	silvered mica
L1, L2 1-407-591-00	Inductor (UK Model)	C057,058	1-107-157-11	270 p	500 V	silvered mica
(1-421-225-11		C101 201	1 121 424 11	470	6 2 V	alast
Æ Mod	el Serial No. 10, 011 and later)	C101,201 C102,202	1-121-424-11	470	6.3 V	
L1 { 1-421-302-22		C102,202 C103,203	1-101-880-11 1-121-413-11	47 p 100	6.3 V	ceramic
	Model Serial No. 10,051 and later)	C103,203 C104,204	1-121-413-11	100	U.J ¥	01001
•	Model Serial No. 10,021 and later)	C105,205)	1-121-654-11	330	25 V	elect
		- ,				

Ref. No.	Part No.	Descrip	tion		Ref. No.	Part No.	Descrip	tion	
C106,206	1-121-424-11	470	6.3 V	elect	C501,601	1-107-071-11	27 p		silvered mica
C107,207	1-101-880-11	47 p		ceramic	C502,602	1-107-093-11	220 p		silvered mica
C108,208	1-121-413-11	100	6.3 V	elect	C503,603	1-121-425-11	470	10 V	elect
C109,209	1 121 416 11	100	25 V	alaat	C504,604	1-101-880-11	47 p		ceramic
C110,210	1-121-416-11	100	23 V	elect	C505,605	1-121-352-11	47	10 V	elect
C111,211	1-108-603-12	0.1		mylar	C506,507	1-121-657-11	1000	25 V	elect
C112,212	1-121-424-11	470	6.3 V		C508,608	1-121-395-11	4.7	25 V	elect
C113,213	1-121-654-11	330	25 V		C509,609'	1-121-373-11	4.7	23 V	elect
C114,214	1-121-419-11	220	6.3 V	i	C510,610	1-121-404-11	33	25 V	elect
C115,215	1-121-410-11	47	25 V	elect	C511,611	1-102-973-11	100 p		ceramic
C117 317	1 107 160 11	100	500 W		5540				_
C117,217	1-107-169-11	100 p	500 V	silvered mica	C512	1-121-657-11	1000	25 V	elect
C118,218 C119,219	1-108-555-12	0.001		mylar	C513,613	1-121-409-11	47	16 V	elect
C120,220	1-108-557-12	0.0012		mylar	C514,614	1-108-244-12	0.033		mylar
C121,221	1-108-565-12	0.0012		mylar	C551,651	1-131-192-61	4.7		solid tantalum
C122,222	1-108-563-12	0.0022		mylar	C552,652	1-102-973-11	100 p		ceramic
,		0,000		,	C553,653	1-131-201-61	22		solid tantalum
C124,224	1-108-583-12	0.015		mylar	C554,654	1-102-958-11	20 p		ceramic
C125,225	1-108-581-12	0.012		mylar	C555,655		_		coramic
C126,226	1-108-585-12	0.018		mylar	C556,656)	1-108-361-12	0.056		mylar
C127,227	1-108-581-12	0.012		mylar		akt o			
C128,228	1-108-591-12	0.033		mylar	C557,657	1-130-005-11	1	100 V	metalized paper
					C558,658		4.5		
C129,229	1-108-587-12	0.022		mylar	C559,659 ⁾	1-131-191-61	47		solid tantalum
C130,230	1-108-585-12	0.018		mylar	C560,561	1-121-654-11	330	25 V	elect
C131,231	1-108-587-12	0.022		mylar					
C132,232	1-121-391-11	1	50 V	elect	C701	1-108-579-12	0.01		mylar
					C702	1-121-398-11	10	25 V	elect
C191~196	1-121-651-11	10	16 V	elect	C703	1-121-395-11	4.7	25 V	elect
C197	1-108-603-12	0.1		mylar	C704	1-108-579-12	0.01		mylar
C201 401	1 107 002 11	220		allere me di maion	C705,706	1-108-603-12	0.1		mylar
C301,401 C302,303	1-107-093-11 1-121-480-11	220 p 22	25 V	silvered mica elect	0.00	4 400 500 40	0.04		
C304,404	1-121-480-11	100	23 V	solid tantalum	C707	1-108-579-12	0.01		mylar
C305,405	1-108-575-12	0.0068		mylar	C708,709	1-108-603-12	0.1		mylar
C306,406	1-121-413-11	100	6.3 V		C710 C711	1-108-595-12 1-108-603-12	0.047 0.1		mylar mylar
	1 122 110 11	100	0.0		C711	1-108-591-12	0.033		mylar
C307,407	1-108-561-12	0.0018		mylar	0712	1 100 0 71 12	0.000		my iai
C308,408	1-121-404-11	33	25 V	•	C713	1-108-603-12	0.1		mylar
C309,409	1 121 (57 11	1000	26 11		C714	1-108-591-12	0.033		mylar
C310,410 ⁾	1-121-657-11	1000	25 V	elect	C715	1-108-603-12	0.1		mylar
					C717	1-121-480-11	22	25 V	elect
C351,451	1-107-071-11	27 p		silvered mica					
C352,452	1-121-413-11	100	6.3 V	elect	C718,719	1-131-219-61	4.7		solid ta ntalum
					C720	1-121-422-11	220	25 V	elect
C391~393	1-121-651-11	10	16 V	elect	C721	1-121-395-11	4.7	25 V	elect
C395	1-108-603-12	0.1		mylar					

Ref. No.	Part No.	Descrip	tion		Ref. No.	Part No.	Descrip	ion	
C722	1-121-421-11	220	16 V	elect	C1111	1-121-388-11	1000	35 V	elect
C723	1-108-595-12	0.047		mylar					
C123	1100000	0.011		,	C1112	1-108-427-12	0.033	200 V	mylar
C724	1-121-352-11	47	10 V	elect	C1113	1-121-422-11	220	25 V	
C725,726	1-121-422-11	220		elect	C1125	1-101-001-11	1000 p		ceramic
C727	1-121-480-11	22		elect			•		
C121	1-121-400 11				C1201.1202	1-117-100-00	10	150 V	metalized paper
C851,852	1-121-450-11	2.2	50 V	elect	C1203	1-117-101-00	5		metalized paper
C901,902	1-121-651-11	10	16 V	elect		RESI	STORS		
C903,904	1-108-601-12	0.082		mylar					
C905	1-108-591-12	0.033		mylar	All reisstors	are in ohms. Reg	ular type ½	4W ± 59	% carbon and
C906	1-121-398-11	10	25 V	elect	composition	resistors except s	pecial type	e are or	nitted. Check
C907	1-121-450-11	2.2	50 V	elect	schematic di	agram for the resi	istance vali	ues.	
					k = 1,000, M	= 1000 k			
C908	1-121-415-11	100	16 V	elect					
C909	1-131-213-61	0.47		solid tantalum	R004	1-242-727-09	180 k	1/4 W	low noise
C910	1-121-398-11	10	25 V	elect	R005	1-242-721-09	100 k	1/4 W	low noise
C911	1-105-771-13	0.33	200 V	mylar	R006	1-242-713-09	47 k	1/4 W	low noise
C912,913	1-113-072-11	1	AC20	0 V	R008,009	1-224-645-XX	10 k		adjustable
,				metalized paper	R051	1-217-399-00	100	¼ W	fuse
C914	1-121-395-11	4.7	25 V	elect	R104,204	1-242-721-09	100 k	1/4 W	low noise
C915	1-121-651-11	10	16 V	elect	R105,205	1-242-689-09	4.7 k	½ W	low noise
C916	1-121-479-11	22	16 V	elect	R107,207	1-242-009-09	4./ K	/4 11	low Holse
					R108,208	1-224-642-XX	1 k		adjustable
C1001	1-121-654-11	330	25 V	elect	R115,215	1-242-720-09	91 k	1/4 W	low noise
C1002	1-121-651-11	10	16 V	elect					
C1003	1-108-579-12	0.01		mylar	R117,217	1-217-399-11	100	1/4 W	fuse
C1004	1-108-587-12	0.022		mylar	R119,219	1-242-721-09	100 k	1/4 W	low noise
C1005	1-108-597-12	0.056		mylar	R120,220	1-242-689-09	4.7 k	1/4 W	low noise
					R122,222'	1-242-005-05	7.7 K	74 11	10 W HOISE
C1006	1-108-555-12	0.001		mylar	R130,230	1-224-646-XX	22 k		adjustable
C1007	1-121-651-11	10	16 V	elect	R132,232	1-224-040-XX	22 K		aujustaoic
C1008	1-121-409-11	47	16 V	elect					
C1009	1-131-198-61	6.8	16 V	solid tantalum	R148,248				
C1010	1-131-201-61	22	16 V	solid tantalum	R151,251	1-222-777-00	$100 \mathrm{k}$		adjustable
C1011	1-131-195-61	33	10 V	solid tantalum	R154,254 J				
					R303,403	1-242-733-09	330 k	1/4 W	low noise
C1101	1-121-999-11	10	160 V	elect	R304,404	1-242-743-09	820 k	1/4 W	low noise
C1102	1-123-047-11	2200	25 V	elect	R307,407	1-242-689-09	4.7 k	1/4W	low noise
C1103	1-123-118-11	3300	35 V	elect	R309,409	1-2-2-005-05	7. / K	74 11	low holse
C1104,1105	1-121-388-11	1000	35 V	elect	R315,415	1-242-737-09	470 k	1/4W	low noise
C1106	1-108-603-12	0.1		mylar					
					R316,416	1-224-774-00	10 k		adjustable
C1107	1-121-388-11	1000	35 V	elect	R317,417	1 224-114-00	10 %		acjustavic
C1108	1-123-046-11	1000	50 V	elect	R324,424	1-224-643-XX	2.2 k		adjustable
C1109	1-123-047-11	2200	25 V	elect	R325,425	1-224-644-XX	4.7 k		adjustable
C1110	1-121-422-11	220	25 V	elect	R331,431	1-217-387-11	10	¼W	fuse
					R371,372	1-224-252-XX	10 k		adjustable

Ref. No.	Part No.	Description		Ref. No.	Part No.	Description
R373,374	1-224-255-XX	100 k	adjustable		CIA	TITCHES
R375,376	1-222-558-00		ible; HEADPHONE		344	TICHES
	1 22 000 00	LEVEL	iole, MEADI HONE	\$001,002	1-516-699-00	Lavor dida DEC MODE
		#2 \ ZZ		S071	1-516-482-00	Lever-slide, REC MODE Lever-slide, METER
R501,601	1-224-572-00	10 k (R) varia	ble; PLAYBACK	S101,201	1-516-482-00	Lever-slide, MIC ATT
11001,001	1-224-372-00	FINE	iole, I LA I BACK	S102,202	1-516-481-00	Lever-slide, INPUT SELECT
R502,602	1-224-495-00	10 k (Special). VOL	, variable; PLAYBACK	S301,401	1-516-691-00	Lever-slide, PB HEAD
R514	1-217-387-11	10 ¼ W	fuse	S371	1 516 491 00	I was also make any non-prod
R518	1-217-392-11	27 ¼ W	fuse	S371	1-516-481-00	Lever-slide, TAPE SELECT; BIAS
R577,677	1-210-856-11	68 k ¼ W	±2%	S591,691	1-516-482-00 1-516-685-00	Lever-slide, TAPE SELECT; EQ
			carbon		1-516-028-00	Lever-slide, MONITOR
D 5 0 0 6 0 0				3701~700	1-310-028-00	Micro, REC/rewind/stop/fast forward/ playback
R580,680	1-211-913-11	1 k ¼ W	± 1% carbon	S1001,1002	1-516-619-00	Lever-slide, REEL SIZE/TAPE SPEED
R582	1-217-392-11	27 ½ W				
R591,592	1-224-573-00	10 k (Special),	variable; REC ATT		1-516-693-00	Push, POWER (USA/Canada Model)
				S1201	1-516-628-00	Push, POWER (E Model)
R814	1-217-726-11	2.2 ½ W	fuse		1-516-855-00	Push, POWER (UK Model)
				\$1202,1203	1-514-730-00	Micro, SHUT OFF
R932	1-222-773-00	4.7 k	adjustable			·
R905	1-224-641-XX	470	adjustable		L	AMPS
R937,940	1-224-648-XX	100 k	adjustable	DI COL COS	1 510 001 777	
R943	1-206-439-11	1 2 W	metal oxide		1-518-094-XX	
R946,949	1-224-648-XX	100 k	adjustable	PL/01~/05	1-518-053-XX	28 V 40 mA
R954,956	1-224-647-XX	47 k	adjustable			
R957	1-206-439-11	1 2 W	metal oxide		H	EADS
R974	1-224-642-XX	1 k 2 W	adjustable			
				EH001	8-828-522-00	Erase, EF18-2202
R1001	1-244-859-11	270 ½ W	carbon	RH002	8-825-558-10	Record, RF142-2202B
R1005	1-224-491-11	22 k, adjustabl	e; metal oxide	PH003	8-825-638-00	Playback, PF164-2202
R1007	1-224-493-11	10 k	adjustable	PH004	8-825-636-10	Playback, PF142-4202A
R1009	1-224-574-11		ole; SPEED VOL			
R1010	1-224-489-11	•	le; metal oxide		MISCEL	LANEOUS
R1022,102	7 1-244-801-11	1 ½W	carbon	CP051	1 464 020 12	P: 0 V 460.17
D1101	1 204 700 11				1-464-029-12 1-101-534-31	Bias Osc Unit, 160 kHz
R1101	1-206-709-11	220 3 W	metal oxide			Encapsulated Component, C-R
R1103 R1107	1-224-644-XX	4.7 k	adjustable		1-101-534-31	Encapsulated Component, C-R
R1107 R1109	1-217-430-11	4.7 ½ W	fuse	CP1201	1-231-057-31	nada Model)
R1111	1-224-489-11 1-224-644-XX	2.2 k, adjustabl			1-231-05/-31 (E Mode	Encapsulated Component, C-R
KIIII	1-224-044-AA	4.7 k	adjustable	CB1201	(E Mode	51)
R1114	1-217-430-11	4.7 ½W	fuse	CP1201 CP1203	1-101-534-31	Encapsulated Component, C-R
R1115	1-217-430-11	4.7 72 W	fuse	011203		
R1118	1-244-644-XX	4.7 k	adjustable	F1	1-532-235-00	Fuse 315 mAT (IIV Mod-13
R1120	1-217-158-11	0.47 5 W	fuse		1-532-255-00	Fuse, 315 mAT (UK Model) Fuse, 4 AT (UK Model)
	1-217-430-11	4.7 ½ W	fuse		1-532-330-00	Fuse, 500 mAT (UK Model)
	. ,				1-532-078-00	Fuse, 1 AT (UK Model)
			į		1-532-279-00	Fuse, 500 mAT (UK Model)
					1-532-284-00	Fuse, 630 mAT (UK Model)
						,

F10

1-533-082-00 Fuse, 2 A (UK Model)

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
F1201	1-532-100-00	Fuse, 2 A (E Model) Fuse, 2 A (USA/Canada Model)		J	ACKS
•	1-532-268-00 (USA M (Canada (E Mode 8-832-638-05	Fuse, 2 A odel Serial No. 10,051 and later) Model Serial No. 10,021 and later) el Serial No. 10,011 and later) Motor, supply/take-up reel; IC-638R	CNJ1 CNJ2~4 CNJ5 CNJ7		Connector, 22 p Confector, 10 p Connector, 18 p Connector, 8 p Connector XLR-3-13; MIC IN anada Model)
M1303 ME	8-836-124-10 1-520-186-31	Motor, capstan; uc-124G Meter, PEAK PROGRAM		(E Mode	Connector, ELR-3-14; MIC IN
PM1203 PM1204 PM1205 RY701,702	1-454-145-00 1-454-143-00 1-515-256-00	Solinoid, SHIFTER Solinoid, BRAKE Relay, 24 V	CNJ16, 17 CNJ18, 19 CNJ20	1-507-378-XX 1-507-378-XX 1-509-062-00	Jack, 2 p; LINE IN Jack, 2 p; LINE OUT Connector, AC IN mada/E Model) Connector, AC IN (UK Model)
RY901	1-515-127-00	Relay, 24 V 37 mA	CNJ21	1-526-528-00 (USA/Ca	Connector, AC OUTLET anada/E Model)
	1-452-072-00 1-506-180-00 1-507-255-00 1-509-427-00 1-509-482-00 1-517-018-00 1-533-048-XX 1-533-082-00	Ring, magnet Plug, dummy Socket, REMOTE CONTROL Voltage Selector (E Model) Voltage Selector (UK Model) Holder, lamp Holder, fuse (USA/Canada/E Model) Holder, fuse (UK Model)	CNP2~4 CNP6 CNP7 CNP8~10 CNP11 CNP12, 13 CON J101, 201	1-508-699-00 1-508-693-00 1-508-694-00 1-508-693-00 1-508-693-00 1-508-744-00 1-507-476-XX	Connector, 10 p Connector, 10 p Connector, 8 p Connector, 10 p Connector, 8 p Connector, 10 p Connector, 10 p Jack, phone; MIC
			J501	1-507-476-XX	Jack, binaural; HEADPHONES

ACCESSORIES									
Part No.	Description	Part No.	Description						
X-3141-019-0	Adaptor Ass'y	1-534-819-11	Cord, power (UK Model)						
X-3701-018-0	Tips Ass'y, head cleaning (Canada Model)								
		3-780-811-21	Manual, instruction (USA Model)						
1-534-049-51	Cord, connection; RK-74H	3-780-811-32	Manual, instruction (Canada/E/UK Model						
1-534-099-XX	Cord, power (E Model)	3-793-010-20	Booklet, tape talk						
1-534-262-16	Cord, power (USA Model)	8-823-502-00	Tape, Fe-Cr (E/UK Model)						
1-534-375-12	Cord, power (Canada Model)	8-860-018-00	Reel, metal: R-11A						

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